

Review of Existing Codes of Practice on Minimising Noise

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Prepared by

RUPERT TAYLOR FIOA

Consultants in Acoustics and Noise Control

Spring Garden, Fairwarp, Nr Uckfield, E. Sussex, TN22 3BG

Website: ruperttaylor.com
Email: rmitt@ruperttaylor.com

REVIEW OF EXISTING CODES OF PRACTICE ON MINIMISING NOISE

EXECUTIVE SUMMARY

In 1982, three Codes of Practice were approved under the procedure in S71 of the Control of Pollution Act 1974. These three codes were:

Code of Practice on Noise from Ice-Cream Van Chimes etc
Code of Practice on Noise from Model Aircraft
Code of Practice on Noise from Audible Intruder Alarms

In 2004 Defra commissioned Rupert Taylor's practice to carry out a review of these codes. The principal objectives of the review were to assess the usage, effectiveness, and currency of the codes. A further aspect of the study was to investigate whether their 'adopted' status had any bearing on their effectiveness. The study was to recommend any changes necessary to the codes in relation to their currency and the findings of the study on the adopted status and the usage of the codes.

Following an initial examination of the codes by Rupert Taylor, consultations were undertaken with individuals and organisations that use or were affected by the codes. The consultations encompassed local authority officers (principally those in an environmental health role), trade bodies (e.g. the Ice Cream Alliance) and professional organisations (e.g. the Justices' Clerks' Society).

As regards the Code on ***Ice-Cream Van Chimes***, about 85% of those responding from Local Authorities (LAs) said that they used it, though only 70% had had complaints about this source of noise in the previous year. Most of these LAs (90%) thought this Code was effective and about 70% considered that its adopted status enhanced its effectiveness. Nearly 30% of them considered that this source of noise was a problem in their area, but none had specific proposals for modifying this Code (apart from updating references in it to superseded statutes and standards).

The Ice-Cream Alliance commented on the Code and suggested that the 7 pm cut-off time could be extended to 8 pm in spring and summer, and that the maximum duration specified for sounding the chimes could be increased from the current value of 4 seconds to 8 seconds.

Only one responding LA reported complaints in the past year about noise from the flying of ***Model Aircraft***, and none of the LAs considered that noise from this activity was a problem in their area. Nearly half the respondents (46%) used the Code and a similar number (44%) considered it effective. More than half (about 61%) reported that its adopted status enhanced its effectiveness.

The British Model Flying Association (BMFA) did not propose any changes to the Code. However, the BMFA highlighted the position of gas-turbine-powered models in relation to the static test in the Code. The BMFA's view is that this procedure does not take account of the different noise characteristics of the gas-turbine in comparison to conventional internal combustion engines, and that consequently the test level is not appropriate. Although they were unable at present to propose a suitable modification to the Code or test procedure to address this point, the BMFA offered to arrange a practical demonstration, if requested.

All the responding LAs had received complaints about noise from ***Audible Intruder Alarms*** (fixed to premises) in the past year and they regarded noise from these alarms as a problem in their area. All but one of them used the Code (or a local procedure based on it), but only 25% considered that it was effective. Nevertheless, nearly 70% thought that its adopted status enhanced its effectiveness.

Two issues were raised by the responding LAs in relation to audible intruder alarms. The first was the lack of a comprehensive database (in each local authority area) of key-holders who could be called out quickly to turn off misfiring alarms. The second matter was the uncertainty surrounding the requirements for a warrant if the LAs elected to abate the nuisance themselves.

A second on-line questionnaire was provided to Members of the Justices' Clerks' Society and most of those who responded considered that the existing procedures for issuing warrants operated reasonably well. However, it was suggested that if a LA considered that there was a potential for a warrant being required to authorise entry to premises out-of-hours, it would be beneficial to the LA and court personnel if they contacted the courts during office hours that day.

Two-thirds of those responding to the second questionnaire considered that the approved status of the Code was important.

Currency of the Codes

The age of the codes is such that they contain references to superseded statutes and standards, and do not adhere to the best current practice as regards noise measurement. There is also a technical issue as regards the Model Aircraft Code and gas-turbine-powered aircraft. However, to amend the Code to address that point would require further research, including field measurements, which are beyond the scope of this review.

In the case of audible alarms, not only are the existing references in the Code out of date, but also the current situation is changing. There is an emerging European Standard concerning Intruder Alarms, and the Clean Neighbourhoods and Environment Act will provide powers for Local Authorities to designate 'alarm notification areas' as of spring 2006.

REVIEW OF EXISTING CODES OF PRACTICE ON MINIMISING NOISE

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Copies of the two on-line questionnaires

1 INTRODUCTION

1.1 Background and Scope

1.1.1 In 1982 three Codes of Practice were approved under the procedure in Section 71 of the Control of Pollution Act 1974 (CoPA). These three codes were:

- Code of Practice on Noise from Ice-Cream Van Chimes etc
- Code of Practice on Noise from Model Aircraft
- Code of Practice on Noise from Audible Intruder Alarms

1.1.2 As part of their ongoing review of noise control measures, Defra, and through it the Devolved Administrations of the Scottish Executive, the National Assembly for Wales, and the Department of the Environment in Northern Ireland, wished to assess the use and other aspects of these codes.

1.1.3 In 2004, Defra let a contract to review the usefulness and currency of codes of practice to Rupert Taylor.

1.1.4 The scope of the study was to:

- 1 Review the 1982 codes of practice to assess their:
 - usage by Local Authorities (LAs), Local Planning Authorities (LPAs), and other organisations
 - effectiveness in their current form
 - currency
- 2 Investigate their 'adopted' status in respect of:
 - the effectiveness, if any, that this accords the codes
 - the extent to which a code of practice has to be adopted for it to be useful
- 3 Provide recommendations relating to the currency of the codes and any changes that are required
- 4 Report on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

1.1.5 In December 2004, Defra commissioned a short extension to the scope of the study. The extension consisted of consultation with Justices' Clerks and others involved in the issuing of warrants to permit Local Authority staff to enter premises. This topic is primarily relevant to the abatement of noise from misfiring audible intruder alarms.

1.2 Approach to the Study and Structure of this Report

1.2.1 There were two principal stages to the review. Following an initial examination of the codes by Rupert Taylor, consultations were undertaken with individuals and organisations that use or were affected by the codes.

- 1.2.2 The consultations encompassed local authority officers (principally those in an environmental health role), trade bodies, and professional organisations.
- 1.2.3 Local Authorities were consulted in two ways. Direct approaches were made to individual officers who were in the main already known to the members of the practice. Telephone interviews were then conducted with those individuals.
- 1.2.4 The second method of LA consultation was by way of a web-based questionnaire. An invitation to complete this form on-line was issued through an announcement in Environmental Health News, which is published weekly in print and online. A further announcement of this questionnaire was posted on the Chartered Institute of Environmental Health's Professional Forum for Noise ¹.
- 1.2.5 Others affected by the codes in the course of their business or leisure activities were consulted via relevant organisations. These tended to be concerned with only one of the codes in each case.
- 1.2.6 Organisations contacted for this purposes were: the Mobile and Outside Caterers Association (MOCA), the Ice-Cream Alliance, the British Model Flying Association, and several bodies concerned with alarms and security. The Planning Officers' Society was also contacted in connection with the Model Aircraft Code.
- 1.2.7 Because one aspect of the review was concerned with the 'adopted' status of the codes, relevant professional bodies and organisations whose members were largely or exclusively qualified lawyers were also consulted. The organisations contacted were: the Local Government Lawyers Group of the Law Society, the Justices' Clerks' Society, and the United Kingdom Environmental Law Association (UKELA) ².
- 1.2.8 As part of the extension to the study mentioned in paragraph 1.1.5, a second web-based questionnaire was established. The background to the extended study, and the URL for this questionnaire were provided to the Justices' Clerks' Society, the Magistrates' Association, and the editor of the journal '*Justice of the Peace*'.
- 1.2.9 Each of the three codes has been reviewed separately in Chapters 2 – 4 in which the findings of the desktop review, the relevant consultations, and the recommendations for that code are given. Thus, each of these chapters is self-contained.

¹ The CIEH Professional Forums are moderated discussion boards.

² An announcement describing the study and inviting comment was placed in the UKELA Journal *e-law*, which is emailed direct to members.

2 CODE OF PRACTICE ON NOISE FROM ICE-CREAM VAN CHIMES ETC 1982

2.1 Introduction

2.1.1 This chapter reports on the findings of a review commissioned by Defra on the usage and effectiveness of the Code of Practice on Ice-Cream Van Chimes Etc. This Code is one of three that were approved in 1982 under the procedure of S71 of the Control of Pollution Act 1974 (CoPA). The findings in respect of the other two codes³ are reported in other chapters of this report.

2.1.2 The terms of reference for the review were:

- 1 Review the 1982 codes of practice to assess their:
 - usage by Local Authorities (LAs), Local Planning Authorities (LPAs), and other organisations
 - effectiveness in their current form
 - currency
- 2 Investigate their 'adopted' status in respect of:
 - the effectiveness, if any, that this accords the codes
 - the extent to which a code of practice has to be adopted for it to be useful
- 3 Provide recommendations relating to the currency of the codes and any changes that are required
- 4 Report on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

2.1.3 The study consisted of a desktop review of the Code by Rupert Taylor followed by consultation with those applying or affected by the Code. These consultees included local authority officers, trade organisations, and professional bodies.

2.1.4 The findings of the preliminary review are set out in **Section 2.2**, the consultations with LA officers are reported in **Section 2.3**, those with trade bodies in **Section 2.4**, and with professional organisation in **Section 2.5**. The conclusions and recommendations are reported in **Section 2.6**.

2.2 Preliminary Review

2.2.1 It was noted that the approach in the Code to minimising noise is to set guidance on:

- The maximum noise level from the chimes
- The number of vehicles sounding chimes simultaneously in a locality
- The maximum duration for which the chimes should be rung, and
- The frequency within which the chimes should not be resounded

³ Noise from Model Aircraft, and Noise from Audible Intruder Alarms (ie fixed to premises).

- 2.2.2 The Code is quite brief but includes a summary (in its Annex) that is intended to be fixed inside the vehicle so that the operator can be sure of the requirements of the Code. The majority of the requirements in the summary consist of times and distances and hence should be capable of being measured or estimated by the operator.
- 2.2.3 The Code specifies a maximum noise level for the 'chimes'⁴. However, there is no requirement for the noise readings to have been taken for a specific van or set of chimes.
- 2.2.4 Even if the noise level for a given van/set of chimes has been measured, the Code does not require there to be a record of when and under what circumstances the measurements were made. In practice, it is unlikely that the operator would have the equipment required to measure the noise level from the van's chimes.
- 2.2.5 The maximum level for chimes specified in the Code applies when measured at a height of 1.2 m above ground level. For two practical reasons, consideration could be given to modifying this requirement.
- 2.2.6 The first reason is for consistency with current guidelines relating to noise measurement. For example, both BS4142⁵ and PPG24⁶ suggest measurement heights of 1.2 to 1.5 metres. The effect on the measured noise level (for a microphone height in this range, at a distance of 7.5m from the speaker) is negligible for practical loudspeaker heights.
- 2.2.7 The second reason for considering a modification is to address the situation in which the noise level of a van's chimes is measured from a balcony or walkway of flats overlooking the van's location, which could be a street or a square within a housing estate⁷.
- 2.2.8 Such a location could still be at a distance of 7.5 m from the loudspeaker, but would clearly not be 1.2 m (or even 1.5 m) above ground level. Measuring from the balcony might be reasonable if that is the source of complaint; it might even be impractical to measure at a distance of 7.5 m at ground level when the van is there and the chimes are sounding.
- 2.2.9 Statutes and standards referred to in the Code were found to have been superseded or supplemented by later documents. Although there was guidance on the use of measurement equipment, it did not reflect current best practice.
- 2.2.10 The items in **Table 2.1** were therefore proposed to update the Code.

⁴ 80 dB(A) Slow at 7.5m and 1.2 m above the ground

⁵ BS4142:1997. Method for Rating industrial noise affecting mixed residential and industrial areas. Para 5.3 Note 1.

⁶ Planning and Noise PPG24 September 1994. Annex 1 para 8.

⁷ S61 of CoPA 1974 defines "street" as 'a highway ... any other ... footway, square or court which is for the time being open to the public.'

Table 2.1 Recommendations for Updating Ice-Cream Van Chimes Code

Item	Recommendations for updating Ice-Cream Van Chimes Code
1	Include reference to availability of powers to deal with noise in street under the Environmental Protection Act 1990 (EPA) as amended by the Noise and Statutory Nuisance Act 1993 (NSNA), and note that CoPA has been amended (though the relevant provisions are unchanged)
2	Refer to current Standard in relation to Sound Level Meters - BS EN 61672-1:2003
3	A windshield should be used for all measurements
4	The equipment should be calibrated before and after any measurements
5	The equipment should be calibrated by an independent testing organisation at least every two years
6	A measurement height of 1.2 to 1.5 m above ground should be used if at ground level
7	Measurements could be permitted above ground level where it is appropriate to do so (e.g. flats, measuring on a balcony?)
8	Measurements should normally be carried out under free-field conditions unless circumstances make this impractical or inappropriate, in which case the result might need to be corrected for reflection from nearby surfaces

- 2.2.11 In addition to the proposals for updating the Code, consideration was given as to how its use or application could be made more effective.
- 2.2.12 It was noted that there was some guidance that was non-quantitative, and that there was no requirement for a van's chimes to have been subjected to a noise measurement before use.
- 2.2.13 The items in **Table 2.2** were therefore devised as possible means of addressing these points.

Table 2.2 Additional matters re the Ice-Cream Van Chimes Code

Item	Additional matters to consider for the Ice-Cream Van Chimes Code
1	Provide guidance as to amount of reduction that is worthwhile as a minimum in quiet area/narrow streets, e.g. 5 dB
2	Consider whether preset volume settings should be recommended for vans/chimes to enable operators to switch between known levels
3	Consider whether, if measurements of the noise from the van/chimes have been made, a notice to this effect describing the results, date, and circumstances should be fixed inside the van
4	Permit measurements made using other indices such as 1-second L_{Aeq} or SEL in addition to or, instead of the sound pressure level (Slow), with appropriate corrections to relate the results to the level that would be obtained using sound pressure level (Slow)

- 2.2.14 The first three items had cost implications for the operators of ice-cream vans. The third item also had potential resource implications for the acoustics industry. Technical work to produce a measurement protocol etc would be required by items 3 and 4.

- 2.2.15 At the stage that these ideas were formulated it was not known whether there was any need for a change in the approach of the Code. It subsequently emerged from the consultations (described below) that there is no widespread problem with noise from ice-cream van chimes and, where problems arise, the scope and provisions of the existing code are adequate. Consequently, it is unlikely that the additional cost and resources required to implement the additional measures in **Table 2.2** could be justified.
- 2.2.16 Thus, the information required to enable a more formal cost-benefit judgement to be made on whether these items would be worthwhile has not been acquired and these issues were not been pursued.

2.3 Local Authority Consultation

Approach and Response to Local Authority Consultation

- 2.3.1 Several methods were used for the LA consultation.
- 2.3.2 Initially direct approaches were made to officers in cases where they or their Authority were known to the practice. The project scope was outlined and those who expressed willingness to contribute to the study were then sent an email giving further details and invited to set a time for a one-to-one telephone discussion.
- 2.3.3 Further direct approaches and follow-up emails were made at the Institute of Acoustics Autumn Conference. Emails were also sent to EH staff who had confirmed via an intermediary (e.g. member of a Local Pollution Control Group) their willingness to be contacted regarding the study.
- 2.3.4 Finally, a questionnaire was posted on the web for completion online (see Appendix A). The contact methods and outcomes are presented in **Table 2.3** (in some cases more than one officer was contacted at the same authority where the initial contact gave contacts details for colleagues to be contacted instead of, or in addition to, themselves).

Table 2.3 Local Authorities contacted, method, and outcome

Local Authority Contacted	Officers	Call or meeting Plus follow up email	first Email only	Telephone discussion or on-line form completed
Totals	34	19	15	10

- 2.3.5 Four of the initial contacts called back for a fuller discussion, as did two of the officers approached at the Institute of Acoustics conference. Because of this limited response, those direct contacts that had not responded were emailed with the link to the online questionnaire asking them to complete that if it was more convenient. This resulted in a further online form being completed. Further contacts via local EHO groups and Defra were pursued and this led to 3 more on-line forms being completed.

- 2.3.6 Five more authorities responded via the online form without having been previously contacted, presumably in response to the Press Release in Environmental Health News. The full list of the 15 responding LAs is in **Table 2.4**, which also classifies the area as Urban or Non-Urban.
- 2.3.7 The criterion used for this classification is taken from the AEA Technology report for the then DETR on defining agglomerations⁸. This was produced as part of the Department's studies concerning the EU Directive on the Assessment and Management of Environmental Noise (COM2000 468). The report refers to the definition of urban land in the 1991 Census of Key Statistics for Urban and Rural Areas – ONS 1991. This definition specifies that land may be considered to be urban if the population density per km² is in excess of 500 persons.
- 2.3.8 Data on the type of each Local Authority, its population, and area were obtained from the following websites:
- <http://www.psr.keele.ac.uk/area/uk/cc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/lc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/dc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/mc.htm>,
 - <http://www.psr.keele.ac.uk/area/uk/uc.htm>
 - <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-population>
 - <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-area>

Table 2.4 List of all Local Authorities responding

Authority	Type	Predominant Character
Birmingham City Council	Metropolitan	Urban
Bristol City Council	Unitary	Urban
Cotswold District Council	District	Non-Urban
Dudley MBC	Metropolitan	Urban
Hart DC	District	Non-Urban
London Borough of Greenwich	London Borough	Urban
Luton BC	District	Urban
North Herts DC	District	Urban
Northampton BC	District	Urban
South Northants DC	District	Non-Urban
Stockport MBC	District	Urban
Stratford-upon-Avon DC	District	Non-Urban
Waverley BC	District	Non-Urban
Wealden DC	District	Non-Urban
Worcester City Council	District	Urban

⁸ Identifying the Options Available for Determining Population Data and Identifying Agglomerations in Connection with EU Proposals Regarding Environmental Noise. A report produced for Department of the Environment Transport and the Regions, The Scottish Executive, The National Assembly for Wales and Department of Environment for Northern Ireland. January 2001.

Findings of Local Authority Consultation

- 2.3.9 It was apparent during the initial conversations that in most cases the officers had not needed to respond to any noise complaints relating to ice-cream van chimes for some time. Consequently, the Code was little used by them, though it was thought to be useful for it to be available.
- 2.3.10 The few officers who had used the Code in the past did not mention any particular deficiencies with the substantive aspects of the Code, though it was acknowledged that the references to other documents were out-of-date. Most considered that the Code was effective and one commented that the fact that it was straightforward and not unnecessarily technical was beneficial.
- 2.3.11 **Table 2.5** summarises the answers to the principal questions by those who responded in detail by telephone or online.

Table 2.5 Responses to Principal Questions re Ice-Cream Van Chimes

Question	Yes	No	No of responses
Complaints in past year	9	4	13
Consider it a problem	4	10	14
Use the Code	12	2	14
Code is Effective	9	1	10
Status enhances effectiveness	9	4 (Makes no difference)	13

- 2.3.12 Among this group, about two-thirds had had a complaint about noise from Ice-Cream Van Chimes in the past year, but only about half of these (i.e. around one-third of the total) considered this source of noise to be a problem in their area.
- 2.3.13 Most respondents said that they 'used' the Code, though this must have included those who had used it in the past since not all of them reported a complaint about noise from this source in the past year.
- 2.3.14 Most respondents considered that the Code was effective and that 'approved' status of the Code enhanced its effectiveness. It also emerged that this status can be of value outside the courts. Most complaints appear to be resolved without legal action and it is helpful to be able to refer to the Code as one that has been approved under the Control of Pollution Act 1974, e.g. in correspondence with the person contravening its terms. Nevertheless, several respondents considered that the status of the Code made no difference to its effectiveness.

- 2.3.15 Respondents had typically had between 0 and 2 complaints in the last year. Two officers reported respectively 6 and 10 complaints concerning ice-cream van chimes in the previous year. From further discussions, it emerged that figures log complainants rather than individual vans. In practice, complainants typically do not give details of the van about which they are complaining. This is not surprising since they might not be able to see the source(s) of noise.
- 2.3.16 It can be difficult even for LA officers to locate a specific van with a noisy chime in a network of streets on a large housing estate. It is quite possible, therefore, for multiple complaints to relate to a single van, on one or more occasions.

2.4 Consultation with trade bodies

Trade Bodies Consulted

- 2.4.1 Two trade bodies were identified as being potentially relevant and direct contact was made with their Secretariats. This was followed up with an email explaining the scope and purpose of the project and inviting comments. The bodies were the Mobile and Outside Caterers Association (MOCA) and the Ice-Cream Alliance.
- 2.4.2 The first of these organisations does have as members mobile ice-cream vendors (known as ‘mobilers’ in the trade), but most of their members sell hot food (e.g. kebabs). From their website, it seems that vending of hot food tends to be based on fixed pitches and/or attendance at shows, fetes etc. Consequently, although vehicles vending hot food still need to comply with the CoPA and are covered by the Ice-Cream Vans Chimes Code, the use of ‘chimes’ is less important for their business. No comments were received on the Code on behalf of MOCA, but this organisation suggested that the study might be more relevant to the Ice-Cream Alliance.
- 2.4.3 The Ice-Cream Alliance (ICA) covers all aspects of the manufacture and sale of ice cream and includes mobilers. It was established in 1944 and so might have been consulted when the 1982 Code was in preparation, but they were unable to confirm this. They undertook a consultation for this review with appropriate members and provided a formal response
- 2.4.4 Contact was also made with a manufacturer of ice-cream vans – Whitby Engineering – to obtain information about the ‘chimes’ themselves⁹.
- 2.4.5 Electronic Engineering (Ealing) Ltd. (which was also located via the Internet) trades as Harvin Chimes and has been operating since 1954. They were consulted when the 1982 Code was being prepared. They were contacted as part of the current study and commented by telephone on some aspects of the Code. Background information on the technology was also provided.

⁹ Whitby Engineering was selected after a web search, and following an item on BBC Radio 4 covering the ice-cream trade’s annual Expo at Harrogate in which their top of the range van (a £40,000 SS Enterprise) was featured. It was learnt that the firm buys in the ‘chimes’ from Electronic Engineering (Ealing) Ltd.

A Brief History of Chimes

- 2.4.6 The comments from the Ice-Cream Alliance and Harvin chimes can be better understood from knowledge of the development of chimes in the ice-cream trade.
- 2.4.7 Mobile ice-cream sellers have been operating for perhaps as long as 100 years. Initially when ice-cream vendors were hawking their wares, they used a hand bell, in common with other street traders. In the mid-1950s the American Tonibell company then introduced a system of metal tubes struck with hammers to play their characteristic 'jingle'. However, this proved to be both expensive to produce and unreliable in operation so the then proprietors of Harvin Chimes were approached to develop an alternative.
- 2.4.8 They proposed the use of Swiss 'musical box' methods for producing the tune – a method that had been used for larger items than musical boxes since at least the 19th-century. This has probably led to the characteristic sound of ice-cream chimes.
- 2.4.9 At that time, the sound was produced by mechanical means and, if the playing was suspended, the melody would resume from the stopping point.
- 2.4.10 Currently, Harvin Chimes still uses the same method to produce the many dozens of tunes that they can supply, but these are now recorded and encoded in a chip that can hold 6 or 7 tunes, each of about 30 to 40 seconds duration.
- 2.4.11 There are other suppliers of ice-cream 'chimes' but these are all produced by totally electronic methods; their chips can hold many more than half-a-dozen tunes.
- 2.4.12 If the tune from a chip-based chime is interrupted, it will replay from the start of the tune when playing resumes.
- 2.4.13 The sound is produced via a loudspeaker which, in the case of Harvin Chimes' systems, is designed to be mounted in the floor of the vehicle, facing down towards the road. (An aluminium horn-shaped cone is used for efficiency of output and resistance to the environment). The downward facing speaker is intended to distribute the sound approximately equally in all directions from the vehicle.
- 2.4.14 Power output is not set to ensure a specific noise level since the noise level in service is dependent on the details of the mounting arrangement and the nature of the ground surface over which the van is operating.
- 2.4.15 There are currently about 5000 mobilers trading. The Ice-Cream Alliance advice to them on their website notes:

Once you have established a route, do it regularly and at set times, be disciplined and you will be rewarded with regular custom. Buyers will be expecting you, be prepared for you and be more likely to have decided what they want and have the money ready.

This will be the main area where you use chimes to attract custom, but their use is governed by a code of practice and they should be used with discretion to ensure that they attract more customers than alienate! (see separate panel)

- 2.4.16 It is understood that mobiler might use a particular tune to distinguish his/her van from others.

Comments from Ice Cream Alliance and Harvin Chimes

- 2.4.17 The ICA's response ¹⁰ is reproduced below:

As previously advised the Ice Cream Alliance would recommend that:

- a) As regards the hours during which the chimes can be sounded, that the evening cut-off of 7.00 pm should be extended to say 8.00 pm through the spring and summer months. It is felt that time limit of 7.00 pm is unrealistic when one considers that in summer there is daylight until 9.30 pm (May, June, July and August). There are many people mowing lawns up to and beyond 9.00 pm and these make considerably more noise than chimes going off for a few seconds. Even in the winter months 7.00 pm is rather early when one considers that most families have both parents working and that many people working 'flexi-time' arrive home later than 7.00 pm.
- b) Currently, the Code restricts the length of a single 'sounding' to a maximum duration of 4 seconds. The ICA believes that it would be helpful to increase that to 8 seconds.

In summary, street trading, particularly for ice cream mobilers, is a tradition going back probably 100 years. It is part of our street heritage and in many communities the ice cream mobiler is a point of contact for many people and a source of pleasure particularly for young children and especially old people who perhaps cannot venture too far from their front door. Ice cream mobilers, of which there are 5,000 in the UK are giving a valuable service to the community. To curtail this by limiting the sensible use of chimes will not only prove detrimental to the community, but could also see many mobilers going out of business.

- 2.4.18 In conversation with Harvin Chimes two points were discussed:

- 1 Currently, the Code restricts the length of a single 'sounding' to a maximum duration of 4 seconds. This probably not long enough for a listener to identify the 'tune' from which they can in turn identify the particular mobiler. Perhaps an extension to, say, 10 seconds would be more help of for this purpose.
- 2 The maximum noise level in the code was set in the 1980's when few houses had double-glazing whereas today many more do so. Furthermore, homes are more likely to have equipment that can generate noise (e.g. domestic appliances and entertainment systems). Perhaps, therefore, the permitted noise level should be higher now if it is to be as audible as in the past (i.e. to attract attention to the presence of the mobiler in the vicinity).

Comment on response from trade bodies

- 2.4.19 Changing the time beyond which chimes can be used would require primary legislation since the 7 pm cut-off is embodied in the Control of Pollution Act 1974 itself, not the Code of Practice.

¹⁰ Letter dated 11 November 2004

- 2.4.20 The ICA's website give details of the working practices of the Mobiler of the Year 2004 and nominees for the title, and most of them trade beyond 7 pm. However, it is not clear whether this demonstrates the need to permit chimes to be sounded beyond 7 pm or whether it is possible to trade at that time despite not being permitted to use chimes.
- 2.4.21 The increased use of double-glazed windows does not necessarily equate to a higher level of sound insulation for homes compared with the period when the Code of Practice was adopted, since the incidence of open windows (which might be expected in warmer weather) would negate any benefit.

2.5 Consultation with professional organisations

- 2.5.1 The final element of consultation was intended to elicit a professional view on the question of the 'adopted' status of the Code and whether it was an important factor in the Code's effectiveness. The following bodies were therefore contacted: the Local Government Lawyers Group of the Law Society, the Justices' Clerks' Society, and the United Kingdom Environmental Law Association (UKELA).
- 2.5.2 It was noted above the LA officers reported few complaints about noise from ice-cream chimes. Moreover, none mentioned taking an ice-cream van operator to court regarding noise from the chimes. Consequently, most lawyers probably have no experience of the Code. It is perhaps not surprising, therefore, that no comments on it were received from any of the lawyers' organisations contacted.

2.6 Conclusions

- 2.6.1 From the preliminary contacts with the LAs and the responses received, it appears that not many ice-cream vans are a source of complaints about noise from their chimes, though some officers recalled that there had been more complaints about them in the past.
- 2.6.2 The apparent decline in the general occurrence of ice-cream van chimes as a source of complaint could be caused by a number of factors.
- 2.6.3 The ICA's website notes that there are about 5000 mobilers trading and refers to the 'heydays' of the 1970s when presumably there were more. Any reduction could be itself attributed to the increase in the percentage of homes owing a freezer (from around 45% in 1981 to about 95% in 2002)¹¹ and the availability of ice cream in supermarkets. Fewer mobilers might be a factor in the presumed reduction in the incidence of complaints about them.
- 2.6.4 It is not known whether the proportion of mobilers who are members of the ICA – and might be better informed about their obligations under the Code than non-members – has increased, but greater 'voluntary' observance of the Code's provisions could be a further reason for the apparent reduction in complaints.

¹¹ **Living in Britain** General Household Survey 2002, ONS.

- 2.6.5 One of the points raised in consultation was that potentially better sound insulation of a typical home and/or higher levels of noise within it from domestic sources could reduce the audibility of noise in the home and this might lead to a reduction in complaints about chimes.
- 2.6.6 Other factors that could be operating include social changes that have affected attitudes to noise.
- 2.6.7 Since the reason(s) for the apparent decline in complaints about noise from ice-cream van chimes is unknown, changes that relax the constraints in the Code run the risk of leading to an increase in the incidence of complaints. Further research would therefore be wise before proposing changes that would lead to more noise from this source.
- 2.6.8 There were no specific suggestions from the LAs contacted for revisions to the Code (apart from one opinion that there should be a complete ban on the use of chimes). One comment on whether revision would be helpful was that the Code should not be made over-technical.
- 2.6.9 From the submissions received, together with the findings of the desk-top review, the following conclusions are drawn:
- 1 The proposals in **Table 2.1**, which consist of updating of references and clarification of some aspects of the Code, do not conflict with any of the comments received and could therefore be considered for implementation. However, some of these would require further technical work before a proposal could be formulated.
 - 2 The matters set out in **Table 2.2** could add to the technical complexity of the Code and place additional burdens on the suppliers and operators of the vans which might be unnecessary if it is generally the case that noise from chimes is not a particular problem.
 - 3 Changes to relax the constraints in the Code could be considered in the light of changes in a number of circumstances since the Code was approved, but to evaluate the effects of any such changes would require further research.

2.7 Recommendations and findings of the study

- 2.7.1 This section:
- 1 Provides recommendations relating to the currency of the codes and any changes that are required
 - 2 Reports on the on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes
- 2.7.2 If the Code of Practice on Noise from Ice-Cream Van Chimes Etc is revised, it is recommended that the changes set out in **Table 2.6** be put into effect.

Table 2.6 Recommendations for updating Ice-Cream Van Chimes Code

Item	Recommendations for updating the Ice-Cream Van Chimes Etc Code
1	Include reference to availability of powers to deal with noise in street under EPA as amended by NSNA, and note that CoPA has been amended (though the relevant provisions are unchanged).
2	Refer to current Standard in relation to Sound Level Meters - BS EN 61672-1:2003
3	Specify that a windshield should be used for all measurements
4	Specify that the equipment should be calibrated before and after any measurements
5	Specify that the equipment should be calibrated by an independent testing organisation at least every two years
6	Specify that a measurement height of 1.2 to 1.5 m above ground should be used (if at ground level)

2.7.3 The recommendations in **Table 2.6** could be implemented without requiring any further technical work.

2.7.4 Additional proposals are included in **Table 2.7**, but further technical work would be required before they could be considered.

Table 2.7 Proposals for updating the Ice-Cream Van Chimes Etc Code

Item	Proposals for updating the Ice-Cream Van Chimes Etc Code
7	Measurements could be permitted above ground level where it is appropriate to do so (e.g. flats, measuring on a balcony?)
8	Measurements should normally be carried out under free-field conditions unless circumstances make this impractical or inappropriate, in which case the result might need to be corrected for reflection from nearby surfaces

2.7.5 That study found that most LAs considered that there was no problem from this noise source in their area and hence no requirement to take legal action. However, most of the LAs that expressed a view considered that the approved status of the Code enhanced its effectiveness. Out of court, the status can be referred to when communicating with operators of vans about which noise complaints have been received, or have been observed infringing the terms of the Code.

2.7.6 There were few complaints reported in most LAs for this noise source and this could lead to the conclusion that the Code would be little used. However, though it might be used infrequently in a given LA (since there are likely to be relatively few relevant complaints), the use is likely to be widespread. Indeed, it was regarded as being 'used' even by LAs where there were no recorded complaints about Ice-Cream Van Chimes in the past year. Thus, the Code should be regarded as more frequently used than the low complaint rate for this source initially suggests.

3 CODE OF PRACTICE ON NOISE FROM MODEL AIRCRAFT 1982

3.1 Introduction

3.1.1 This chapter reports on the findings of a review commissioned by Defra on the usage and effectiveness of the Code of Practice on Model Aircraft. This Code is one of three that were approved in 1982 under the procedure of S71 of the Control of Pollution Act 1974 (CoPA). The findings in respect of the other two codes¹² are reported in other chapters of this report.

3.1.2 The terms of reference for the review were:

- 1 Review the 1982 codes of practice to assess their:
 - usage by Local Authorities (LAs), Local Planning Authorities (LPAs), and other organisations
 - effectiveness in their current form
 - currency
- 2 Investigate their 'adopted' status in respect of:
 - the effectiveness, if any, that this accords the codes
 - the extent to which a code of practice has to be adopted for it to be useful
- 3 Provide recommendations relating to the currency of the codes and any changes that are required
- 4 Report on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

3.1.3 The study consisted of a desktop review of the Code by Rupert Taylor followed by consultation with those applying or affected by the Code. These consultees included local authority officers, trade organisations, and professional bodies.

3.1.4 The findings of the preliminary review are set out in **Section 3.2**, the consultations with LA officers are reported in **Section 3.3**, those with trade bodies in **Section 3.4**, and with professional organisation in **Section 3.5**. The existence of controls imposed by local Byelaws is considered in **Section 3.6**. The conclusions and recommendations are reported in **Section 3.7**.

3.2 Preliminary Review

3.2.1 The Code provides two kinds of guidance. Some of this is quantitative (e.g. the maximum noise level from a single model¹³) but the majority of the Code is descriptive. It attempts to provide principles to minimise noise that are to be considered in the individual circumstances of a given flying location. It considers both established and proposed sites (some of which might require planning consent, depending on the degree of use).

¹² Noise from Ice-Cream Van Chimes Etc, and Noise from Audible Intruder Alarms (ie fixed to premises).

¹³ 82 dB(A) Max Slow at 7 metres

- 3.2.2 The guidance on the matters that need to be taken into account in determining what controls are appropriate for a particular site is classified into: separation distance, times of operation, numbers of aircraft in simultaneous flight, and noise barriers.
- 3.2.3 The Code also provides a protocol for measuring the noise from an individual model aircraft.
- 3.2.4 Where it is provided, the quantitative guidance is clear, but since the Code is relatively long, it was considered that the provision of a summary of this guidance in an Annex (as is provided in for the Ice-Cream Van Chimes Etc Code) could be helpful ¹⁴.
- 3.2.5 Although the Code appears to have as its goal the operation of model aircraft flying without causing a nuisance, there are a number of places in the text where the Code's phrasing is ambiguous and appears to describe a noise standard or approach that might give rise to a nuisance.
- 3.2.6 The Code only requires a model aircraft to be fitted with a muffler wherever this is practicable. Where the model is being flown in a national or international competition no muffler is required and the model need not meet the noise limit set out in the Code.
- 3.2.7 In the course of the preliminary review, useful information was obtained from the website of the British Model Flying Association. Their website highlighted two issues, in particular. One was some practical considerations in the application of the noise test method to model helicopters. The second was an apparent anomaly that can arise with gas-turbine powered model aircraft.
- 3.2.8 As regards model helicopters, subsequent contact with the BMFA has revealed that their 2-position noise test is proposed for a combination of safety and practical reasons. The method set out in the Code of Practice requires the model to be fixed to a bracket or held by one person. There are safety implications for a person holding a model helicopter that would not arise in the case of fixed wing models, and the BMFA procedure could be carried out more easily than if a bracket is used to support the model.
- 3.2.9 The BMFA's suggestion of 2 (crosswind) locations, instead of the 4 (downwind) positions specified in the Code, is a pragmatic proposal to obtain a representative noise level from 2 positions instead of 4. A factor in this is that the principal noise sources and the levels measured from them are different for a helicopter and a fixed wing model.
- 3.2.10 The main noise sources on a fixed wing aircraft are the exhaust (which typically faces to the rear and can be screened to one side by the fuselage), the air intake (near the front), the propeller, and possibly structural vibration of the fuselage itself. For a helicopter, the principal sources of noise are the exhaust (which typically facing downwards) and the main rotor ¹⁵.

¹⁴ The Code for Ice-Cream Van Chimes Etc, which is much shorter, provides such a summary as an Annex.

¹⁵ The air intake is typically in the centre of the model and the BMFA advise that, for helicopters, it is not a significant noise source in comparison to the other two sources.

- 3.2.11 Averaging the noise levels from the 2 positions proposed by the BMFA is understood to be an attempt to provide a similar level to that which would be obtained from the procedure in the Code, in a way that is easier to implement on site. The BMFA's website offers this as a: '... a safe way of obtaining meaningful figures for helicopter noise levels on club sites by club flyers.' It goes on to state: 'It is not officially part of the DoE Noise Code.'
- 3.2.12 The anomaly in relation to gas-turbine-powered aircraft is that these aircraft are said to be subjectively less 'noisy' when in use than conventionally powered models. However, a gas-turbine-powered aircraft can fail to meet the test limit in the Code, although a conventionally-powered model aircraft, which might appear to be noisier in use, passes it.
- 3.2.13 This conundrum is presumed to arise from the different frequency characteristics of the aircraft (as described in the BMFA's response to the consultation in paragraph 3.4.4, second sentence)¹⁶, and the excess attenuation that occurs to sound energy travelling through the atmosphere, as explained below.
- 3.2.14 As sound propagates through the atmosphere, energy is lost and this loss increases with the frequency of the sound¹⁷. Consequently, noise from a source emitting most of its energy at higher frequencies would be subject to greater attenuation over a given distance than a noise source emitting its energy in a lower range of frequencies than the first.
- 3.2.15 This phenomenon could account for a situation in which the noise level measured close to a 'high-frequency source'¹⁸ is higher than that from a 'low-frequency source' measured at the same distance, but at greater distances from these sources (e.g. 100 m or more) the noise level measured for the 'high-frequency source' is lower than that for the 'low-frequency source'.
- 3.2.16 Although the Code specifies a maximum noise level for the model, there is no requirement for the noise readings to have been taken for a specific model, or to record when and under what circumstances any readings that are taken were made. It is unlikely that the operator would have the equipment required to measure the noise level from the aircraft though an established club might be able to do so.
- 3.2.17 Statutes and standards referred to in the Code were found to have been superseded or supplemented by later documents. Although there was guidance on the use of measurement equipment, it did not reflect current best practice.
- 3.2.18 The items in **Table 3.1** were therefore proposed to update the Code.

¹⁶ The BMFA's response refers to the greater rate of dissipation of the noise from gas-turbine-powered models owing to the greater high-frequency content of their noise output.

¹⁷ This loss is in addition to any attenuation with distance arising from geometric considerations.

¹⁸ i.e. A-weighted level at 7 m as per the test method in the Code of Practice.

Table 3.1 Recommendations for updating Model Aircraft Code

Item	Recommendations for updating Model Aircraft Code
1	Summary of specific and/or quantitative guidance summarised in an Annex
2	Update reference from CoPA to EPA
3	Update reference from BS5960:1980 to BS EN 61672-1:2003, (re: sound level meters)
4	The grade of meter should be specified
5	A windshield should be used for all measurements
6	The equipment should be calibrated before and after any measurements
7	The equipment should be calibrated by an independent testing organisation at least every two years
8	A measurement height of 1.2 to 1.5 m above ground should be used
9	The nature of the ground surface above which the test is conducted should be recorded

3.2.19 As noted above, some of the non-quantitative guidance appeared to be inconsistent with the stated aim of avoiding noise nuisance, and there is no requirement for the noise level from any model aircraft to have been measured.

3.2.20 Furthermore, there were the technical matters raised on the British Model Flying Association's website.

3.2.21 Thus, in addition to the proposals for updating the Code, consideration was given as to how its use or application could be made more effective, and these are listed in **Table 3.2**.

Table 3.2 Additional matters to consider for the Model Aircraft Code

Item	Additional matters to consider for Model Aircraft Code
1	Phraseology could be tightened to avoid risk of giving wrong impression of its aims
2	Basis of statement that type of model of aircraft is unimportant could be reviewed
3	Consider review of exemptions in Code from use of mufflers and/or noise limit
4	Permit measurements using other indices such as 1-second L_{Aeq} in addition to or instead of the sound pressure level (Slow), with appropriate corrections to relate the results to the level that would be obtained using sound pressure level (Slow)
5	Consider a regime of marking tested models and providing a certificate to be carried by the operator
6	The Code could refer to the additional techniques for reducing noise from the aircraft (engine size, propeller pitch, and throttle opening)
7	Consider a modified level/test distance/procedure for gas turbines
8	Consider a modified procedure for testing model helicopters
9	Refer to need to check whether planning permission is required

3.2.22 A preliminary assessment of the implications of the items in **Table 3.2** for cost/resourcing and information requirements are listed in **Table 3.3**.

Table 3.3 Possible implications of additions to the Code listed in Table 3.2

Item from Table 3.3	Cost/Resourcing	Information	Other
1	Little direct cost		
2	Potentially high research needed	if	Might require new research if basis of statement not found
3	Potentially high research needed	if	Might require new research Potential implications for competition flying
4	Potentially high research needed	if	Might require new research
5	Potentially high for flyers depending on method of implementation		Determine whether clubs would be able to resource a scheme at reasonable cost Consider whether any benefits would be commensurate with cost
6	Little cost if BMFA agree to use of their text	None if only general guidance to be given as per BMFA website.	
7	Potentially high		Research required
8	Potentially high		Research required
9	Little direct cost		

3.3 Local Authority Consultation

Approach and Response to Local Authority Consultation

- 3.3.1 Several methods were used for the LA consultation.
- 3.3.2 Initially direct approaches were made to officers in cases where they or their Authority were known to the practice. The project scope was outlined and those who expressed willingness to contribute to the study were then sent an email giving further details and invited to set a time for a one-to-one telephone discussion.
- 3.3.3 Further direct approaches and follow-up emails were made at the Institute of Acoustics Autumn Conference. Emails were also sent to EH staff who had confirmed via an intermediary (e.g. member of a Local Pollution Control Group) their willingness to be contacted regarding the study.
- 3.3.4 Finally, a questionnaire was posted on the web for completion online (see Appendix A). The contact methods and outcomes are presented in **Table 3.4** (in some cases more than one officer was contacted at the same authority where the initial contact gave contacts details for colleagues to be contacted instead of, or in addition to, themselves).

Table 3.4 Local Authorities contacted, method, and outcome

Local Authority Contacted	Officers Call or meeting Plus follow up email	first Email only	Telephone discussion or on-line form completed
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Totals	34	19	15	10
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- 3.3.5 Four of the initial contacts called back for a fuller discussion, as did two of the officers approached at the Institute of Acoustics conference. Because of this limited response, those direct contacts that had not responded were emailed with the link to the online questionnaire asking them to complete that if it was more convenient. This resulted in a further online form being completed. Further contacts via local EHO groups and Defra were pursued and this led to 3 more on-line forms being completed.
- 3.3.6 Five more authorities responded via the online form without having been previously contacted, presumably in response to the Press Release in Environmental Health News. The full list of the 15 responding LAs is in **Table 3.5**, which also classifies the area as Urban or Non-Urban.
- 3.3.7 The criterion used for this classification is taken from the AEA Technology report for the then DETR on defining agglomerations¹⁹. This was produced as part of the Department's studies concerning the EU Directive on the Assessment and Management of Environmental Noise (COM2000 468). The report refers to the definition of urban land in the 1991 Census of Key Statistics for Urban and Rural Areas – ONS 1991. This definition specifies that land may be considered to be urban if the population density per km² is in excess of 500 persons.
- 3.3.8 Data on the type of each Local Authority, its population, and area were obtained from the following websites:
- <http://www.psr.keele.ac.uk/area/uk/cc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/lc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/dc.htm>
 - <http://www.psr.keele.ac.uk/area/uk/mc.htm>,
 - <http://www.psr.keele.ac.uk/area/uk/uc.htm>
 - <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-population>
 - <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-area>

Table 3.5 List of all Local Authorities responding

Authority	Type	Predominant Character
Birmingham City Council	Metropolitan	Urban
Bristol City Council	Unitary	Urban
Cotswold District Council	District	Non-Urban
Dudley MBC	Metropolitan	Urban
Hart DC	District	Non-Urban
London Borough of Greenwich	London Borough	Urban
Luton BC	District	Urban
North Herts DC	District	Urban
Northampton BC	District	Urban

¹⁹ Identifying the Options Available for Determining Population Data and Identifying Agglomerations in Connection with EU Proposals Regarding Environmental Noise. A report produced for Department of the Environment Transport and the Regions, The Scottish Executive, The National Assembly for Wales and Department of Environment for Northern Ireland. January 2001.

Authority	Type	Predominant Character
South Northants DC	District	Non-Urban
Stockport MBC	District	Urban
Stratford-upon-Avon DC	District	Non-Urban
Waverley BC	District	Non-Urban
Wealden DC	District	Non-Urban
Worcester City Council	District	Urban

Findings of Local Authority Consultation

- 3.3.9 Although only a small number of those directly contacted responded formally, it was apparent during the initial conversations that in most cases the officers had not needed to respond to any noise complaints relating to noise from model aircraft for some time. Consequently, the Code was little used by them, though it was thought to be useful for it to be available.
- 3.3.10 The few officers who had used the Code in the past did not mention any particular deficiencies with the substantive aspects of the Code.
- 3.3.11 **Table 3.6** summarises the answers to the principal questions by those who responded in detail by telephone or online.

Table 3.6 Responses to Principal Questions re Model Aircraft

Question	Yes	No	No of responses
Complaints in past year	1	12	13
Consider it a problem	0	14	14
Use the Code	6	7	13
Code is Effective	4	5	9
Status enhances effectiveness	8	5 (Makes no difference)	13

- 3.3.12 Only one instance of a recorded complaint during the past year was found, and none of the respondents considered that this source of noise was a problem in their area.
- 3.3.13 Just under half the respondents said that they used the Code (presumably this mainly related to use prior to the past year) and a similar proportion (though fewer respondents) considered the Code to be effective.

- 3.3.14 Rather more than half of those responding considered that the 'approved' status of the Code enhanced its effectiveness. It also emerged that this status can be of value outside the courts. Most complaints appear to be resolved without legal action and it is helpful to be able to refer to the Code as one that has been approved under the Control of Pollution Act, e.g. in correspondence with the person contravening its terms.
- 3.3.15 The one officer who reported a complaint regarding noise from model aircraft in the past year did not consider that the Code was effective and did not believe that its status made any difference. Specific aspects on which they thought there could be further advice in the Code were trespass and use on council-owned land.

3.4 Consultation with trade bodies

- 3.4.1 Competitive flying of model aircraft is overseen in England by the British Model Flying Association (BMFA). It is not necessary to be a member to operate a model aircraft for leisure purpose and it is believed that no licence is required. No other trade body was identified as representing the sport.
- 3.4.2 The BMFA Secretariat was contacted and they explained that there are 36,000 individual members, the majority of them in England. There are about 780 affiliated clubs, most of which each fly at one location, though a few have more than one site between which they distribute their flying time.
- 3.4.3 The National Championships (in connection with which the Code makes exemptions from its normal provisions) are usually held at Berkstone Heath over the August Bank Holiday weekend (from Saturday till Monday).
- 3.4.4 Contact was made with their General Manager and their Flying Site Adviser who was responsible for much of the information and advice on their website concerned with controlling noise from model aircraft. The comments received from the BMFA are set out below.

We have looked at the Noise Code in some detail and would propose minimal changes to it.

One aspect which is difficult to incorporate satisfactorily is the noise emitted by gas turbine powered models. These often fail the standard noise tests from 7 metres, but once airborne are very quiet due to the frequency of the noise which allows it to dissipate more effectively than the noise emitted from two-stroke and four-stroke engines.

At present, we have been unable to come up with a suitable test which would not preclude Turbine Powered aircraft under the terms of the current code, so some form of exclusion or clarification for Turbine Powered models may be required.

We would be pleased to arrange a practical demonstration at some convenient time so you can witness the noise output from this type of model at first hand?

- 3.4.5 Reference was made in **Section 3.2.7** to advice and comment relating to noise and the Code of Practice that is posted on the BMFA website. The issues raised are summarised in **Table 3.7**, which includes our response to that information.

Table 3.7 Issues raised on BMFA website

Topic	Noise reduction techniques
<i>Guidance in Code</i>	<i>The Code advises that noise reduction at source is to be preferred and suggests that this can be achieved by fitting a ‘muffler’ (i.e. a silencer).</i>
Response	<i>Other techniques to reduce source noise without significantly impairing flying performance were investigated in 1989 by Roger Bellingham – BMFA Flying Site Adviser (in conjunction with Peter Bird of Bird Acoustics). These techniques included using the largest engine that the airframe could accommodate, a higher than normal pitch to the propeller, and fitting a secondary silencer. These measures can enable acceptable flying performance to be achieved at lower throttle settings and so full throttle might only be required for take off and specific manoeuvres, rather than for the whole of a flight. This results in lower noise levels.</i>
Topic	Measurement test procedure applied to model helicopters
<i>Guidance in Code</i>	<i>The procedure specifies four measurement locations: front, rear, and one to each side of the model while it is held 1 to 2 m above the ground.</i>
Response	<i>The BMFA website suggests that a modified version of the test procedure (but not the test level) could be applied to model helicopters. Only two readings are used (and the highest taken) instead of four. This is understood to be for a combination of safety and practical reasons (see paragraphs 3.2.8 to 3.2.11).</i>
Topic	Gas-turbine powered models
<i>Guidance in Code</i>	<i>The Code states that it is applicable to models powered by an internal combustion engine and the noise limit is set for the near-field noise level in dBA. Minimum separation distances are then set ranging from 200 to 500m for various specified circumstances.</i>
Response	<i>Since the Code was promulgated, model aircraft have become available that use a gas turbine as the power unit. The BMFA website notes that these are technically internal combustion engines and are therefore fall within the aegis of the Code. However, their experience is that the noise test procedure gives misleading results for this power unit owing to the different frequency characteristics of noise from gas turbines, which have more of their energy at high frequencies than conventional piston-engined models.</i> <i>In practice, the BMFA’s experience is that a gas-turbine powered aircraft which ‘sounds’ quieter in use than a piston-engined model, can fail the test in the Code while a piston-engined unit, which is subjectively noisier in flight, passes the Code’s static test (see paragraphs 3.2.12 to 3.2.15).</i>

3.5 Consultation with professional organisations

- 3.5.1 In some circumstances, an area used for the flying of model aircraft might require planning permission. A Local Planning Authority would be expected to refer a planning application for such a site to their Environmental Health advisers. Although EH staff were contacted directly as part of the study, a supplementary contact was made with the Planning Officers' Society (POS) whose members are LA planning officers. However, no comments have been received from the POS.
- 3.5.2 The final element of consultation was intended to elicit a professional view on the question of the 'adopted' status of the Code and whether it was an important factor in the Code's effectiveness. The following bodies were therefore contacted: the Local Government Lawyers Group of the Law Society, the Justices' Clerks' Society, and the United Kingdom Environmental Law Association (UKELA).
- 3.5.3 It was noted above that EHOs reported almost no problems with noise from model aircraft. Moreover, none mentioned taking anyone to court regarding this noise. Consequently, most lawyers and planners probably have no experience of the Code. It is perhaps not surprising, therefore, that no comments on it were received from any of the professional organisations contacted.

3.6 Local Byelaws

- 3.6.1 Local authorities have power under certain Acts of Parliament to make byelaws, which are local laws that create criminal offences. Before they can come into effect, byelaws must be confirmed by a Secretary of State.
- 3.6.2 Byelaws can be made on a wide range of topics including trading, ball games, use of hot-air balloons, and model aircraft. Model byelaws on which LAs should base their applications, are published by Government. Responsibility for different legislation and types of land is divided between Government Departments, and model byelaws have been identified from 3 branches dealing with similar topics.
- 3.6.3 Categories of model byelaw that include provisions for model aircraft, together with the responsible Government Branch, are:

- | | |
|---|---------------------|
| • Public Walks and Pleasure Grounds | ODPM |
| • National and Country Parks Model Byelaws | Defra ²⁰ |
| • Commons and Town or Village Green Model Byelaws | Defra ²¹ |
| • Local Nature Reserves Byelaws | Defra ²² |

²⁰ Countryside, Recreation, and Landscape Division, Bristol

²¹ Op cit.

²² National Designated Sites Team, European Wildlife Division, Bristol

- 3.6.4 The byelaws enable areas of land to be set aside for the flying of model aircraft on specified days between specified hours (not applicable to Nature Reserves), or the flying of model aircraft can be prohibited from all or part of the land in question. The model byelaws make reference to the 1982 Code of Practice and incorporate the maximum noise level from the Code.
- 3.6.5 Byelaws are subsidiary to national legislation and cannot be in conflict with it. Byelaws must not deal with a matter already precisely covered by statute or they will be *ultra vires*. This point was specifically addressed in the Noise Abatement Act 1960²³. That Act expressly provided (Section 4) that nothing in sections of the Act creating statutory noise nuisance and restricting the operation of loudspeakers on highways etc would affect any byelaw, or power to make them. In particular, it provided that no byelaw could be held void for repugnancy (i.e. on the ground that it prohibited or restricted any activity permitted by any of those provisions)²⁴.
- 3.6.6 However, neither the Control of Pollution Act 1974, nor the Environmental Protection Act 1990 include a similar provision. Nevertheless, it is assumed that byelaws relating to the control of noise from model aircraft are valid since the Defra Countryside, Recreation, and Landscape Division is currently consulting on the introduction of a so-called fast track procedure for the making of byelaws.
- 3.6.7 Byelaws are passed on an *ad hoc* basis and responsibility for approving them rests with different departments and has, in the past, lain with other departments than those currently responsible for them. As a result, there is no central register listing which LAs have byelaws in force for particular parcels of land.
- 3.6.8 Furthermore, the relevant Departments are contacted from time to time by LAs themselves to ascertain whether the LA in question has any byelaws in place. This suggests that there might be difficulty in determining with certainty whether byelaws are in place for a particular piece of land.

3.7 Conclusions

- 3.7.1 The BMFA's website raise several matters that would require revisions to the Code to resolve. However, further research would be required in almost all of these cases. The BMFA has not requested any specific changes to the Code of Practice except in respect of the application of the Code to gas-turbine-powered models. The Association is not itself in a position to propose a revised limit or procedure but would be willing to assist if any research was undertaken into this issue.
- 3.7.2 The only issues raised from the LA consultations, are legal questions that are not considered with the content of the Code. These should probably not be resolved by revising the Code but by providing advice on whether its use in the specific circumstances is appropriate. This query can be answered by consideration of whether the underlying legislation – the Control of Pollution Act, the Environmental Protection Act, and any local byelaws are appropriate to controlling noise from the activity concerned.

²³ Repealed by the Control of Pollution Act 1974

²⁴ Commentary in *The Law Relating to Noise*. C S Kerse, Oyez Publishing 1975

3.7.3 From the submissions received, together with the findings of the desk-top review the following conclusions are drawn:

- 1 The proposals in **Table 3.1**, which consist of updating of references and clarification of some aspects of the Code, do not conflict with any of the comments received and could therefore be considered for implementation²⁵.
- 2 Reference to the additional techniques for reducing noise listed on the BMFA website could be considered (item 6 in **Table 3.2**).
- 3 Reference to the need for planning consent in some circumstances could be considered for addition to the Code (item 9 in **Table 3.2**).
- 4 Consideration should be given to including reference to the possibility that there could be local Byelaws, which might impose more specific and/or more stringent requirements than the Code, and would override its terms.
- 5 Most of the proposals in **Table 3.2** (apart from items 6 and 9) cover the topics raised by the BMFA, introduce other matters that would require further research, or place a cost burden on those participating in the activity. In the absence of evidence that there is a widespread problem of noise from the flying of model aircraft powered by internal combustion engines, it is questionable whether this research or the imposition of further costs on the participants can be justified.

3.8 Recommendations and findings of the study

3.8.1 This section:

- 1 Provides recommendations relating to the currency of the codes and any changes that are required
- 2 Reports on the on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

3.8.2 If the Code of Practice on Noise from Model Aircraft is revised, it is recommended that the changes set out in **Table 3.8** be put into effect.

Table 3.8 Recommendations for updating the Model Aircraft Code

Item	Recommendations for updating the Model Aircraft Code
1	Include an Annex summarising the specific and/or quantitative guidance in the Code
2	Update reference from CoPA to EPA
3	Refer to current Standard in relation to Sound Level Meters - BS EN 61672-1:2003

²⁵ The noise level the procedure in the Code permits a height for the model under test of 1 to 2 m above ground and specifies a height for the sound level meter of 1.2 m. The effect of changing any of these parameters would require further technical work.

Item	Recommendations for updating the Model Aircraft Code
4	The grade of meter should be specified
5	Specify that a windshield should be used for all measurements
6	Specify that the equipment should be calibrated before and after any measurements
7	Specify that the equipment should be calibrated by an independent testing organisation at least every two years
8	Refer to the need to check whether planning permission is required
9	Refer to the need to check whether the Local Authority are aware of any Byelaws affecting the land in question which might impose additional restrictions

- 3.8.3 The recommendations in **Table 3.8** could be implemented without requiring any further technical work.
- 3.8.4 Additional proposals are included in **Table 3.9**, but further work would be required before they could be considered. Items 10 to 11 would not require further technical work, whereas items 13 – 19 would necessitate additional research before any change could be considered.
- 3.8.5 Given the apparently low incidence of reported complaints from this source of noise further investigations are probably not justified save in respect of item 18 (permitted noise level for gas-turbine-powered models specified in test procedure).
- 3.8.6 Currently it is possible that gas-turbine-powered models are, in practice, subjected to a more stringent test than other powered model aircraft. It is not known whether this is necessary to avoid complaints, or whether relaxing the limit for gas-turbine-powered aircraft would in practice result in higher noise levels from their use. Gas-turbine-powered aircraft might already be flown in breach of the limit, but without giving rise to complaints.

Table 3.9 Proposals to consider for the Model Aircraft Code

Item	Proposals to consider for the Model Aircraft Code
10	Revise phraseology to reduce risk of giving wrong impression of the aims of the Code.
11	Refer to the additional techniques for reducing noise from the aircraft (engine size, propeller pitch, and throttle opening – see BMFA website).
12	Consider a regime of marking tested models and providing a certificate to be carried by the operator.
13	Review basis of the statement that the type of model of aircraft is unimportant.
14	Consider review of exemptions in the Code from the use of mufflers and/or noise limit.
15	Permit measurements using other indices, e.g. 1-second L_{Aeq} , in addition to or instead of the sound pressure level (Slow), with appropriate corrections to relate the results to the level that would be obtained using max sound pressure level (Slow).
16	Investigate effect on measured level of height of source and meter used in test procedure.
17	Investigate effect of the ground surface above which the test is conducted on the measured level.

Item	Proposals to consider for the Model Aircraft Code
18	Consider a modified level/test distance/procedure for gas turbines.
19	Consider ratifying the modified procedure for testing model helicopters proposed on the BMFA website.

- 3.8.7 That study found that most LAs considered that there was no problem from this noise source in their area and hence no requirement to take legal action. However, most of the LAs that expressed a view considered that the approved status of the Code enhanced its effectiveness. Out of court, the status can be referred to when communicating with modellers about whose flying of aircraft noise complaints have been received, or who have been observed infringing the terms of the Code.
- 3.8.8 Only one LA reported a complaint of noise from this source in the past year. However, nearly half those responding said that they used the Code. Model Byelaws (available from the relevant Government departments) refer to the Code. It is also available on the BMFA's website. Thus, the apparent lack of use of the Code might not reflect its importance as a means for regulating noise from Model Aircraft.

4 CODE OF PRACTICE ON NOISE FROM AUDIBLE INTRUDER ALARMS 1982

4.1 Introduction

4.1.1 This chapter reports on the findings of a review commissioned by Defra on the usage and effectiveness of the Code of Practice on Audible Intruder Alarms. This Code is one of three that were approved in 1982 under the procedure of S71 of the Control of Pollution Act 1974 (CoPA). The findings in respect of the other two codes²⁶ are reported in other chapters of this report.

4.1.2 The terms of reference for the review were:

- 1 Review the 1982 codes of practice to assess their:
 - usage by Local Authorities (LAs), Local Planning Authorities (LPAs), and other organisations
 - effectiveness in their current form
 - currency
- 2 Investigate their 'adopted' status in respect of:
 - the effectiveness, if any, that this accords the codes
 - the extent to which a code of practice has to be adopted for it to be useful
- 3 Provide recommendations relating to the currency of the codes and any changes that are required
- 4 Report on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

4.1.3 The study consisted of a desktop review of the Code by Rupert Taylor followed by consultation with those applying or affected by the Code. These consultees included local authority officers, trade organisations, and professional bodies.

4.1.4 A short extension to the review surveyed Justices' Clerks and others involved in the courts with issuing warrants to permit Local Authority staff to enter premises. This topic is not explicitly covered in the Code since the powers under which warrants are issued are contained in primary legislation. This topic is an important factor in the abatement of noise from misfiring audible intruder alarms.

4.1.5 The findings of the preliminary review are set out in **Section 4.2**, the consultations with LA officers are reported in **Section 4.3**, those with trade bodies in **Section 4.4**, and with professional organisations in **Section 4.5**. The conclusions and recommendations are reported in **Section 4.6**.

4.2 Preliminary Review

Approach of the Code to Noise Control

- 4.2.1 The Code's guidance for minimising disturbance from Audible Intruder Alarms is to:
- minimise the likelihood of false alarms by correct fitting and maintenance

²⁶ Noise from Ice-Cream Van Chimes Etc, and Model Aircraft.

- reduce the duration of ringing by fitting a 20-minute cut-out
- reduce the time before the alarm is de-activated by proposing a key-holder registration system in conjunction with both the police and the LA

Relevant Statutory Provisions

- 4.2.2 The Code ultimately relies on the usual powers available to a Local Authority for dealing with a statutory nuisance to affect abatement. At the time the Code was approved, these powers were contained in the CoPA 1974. However, the relevant Statute is now the Environmental Protection Act 1990 (EPA). There are other relevant statutory provisions and these are described below.
- 4.2.3 Statutory powers have been available to those London Boroughs that have adopted the provisions of Section 23 of the London Local Authorities Act 1991 (LLAA). These powers overlap with the guidance in the Code of Practice, but have full statutory status. However, section 23 of the LLAA 1991 will be repealed by Schedule 5 of the Clean Neighbourhoods and Environment Act 2005 when the new powers for local authorities to deal with noise from intruder alarms under sections 69 to 79 of this Act are commenced in spring 2006.²⁷
- 4.2.4 The provisions of S23 also introduced a test of 'annoyance' as a basis for a local authority taking action in respect of a sounding alarm. This appears to require a lower standard of proof than would be required to prove a statutory nuisance (i.e. for action under the EPA 1990).
- 4.2.5 It was found that the Noise and Statutory Nuisance Act 1993 (NSNA) also contained provisions similar to those in the LLAA relating to audible alarms. However, the relevant parts of the NSNA (Section 9 and Schedule 3) were not enacted when the remainder of the Act was brought into operation and remain unimplemented. The Clean Neighbourhoods and Environment Act 2005 (CNEA) repeals Section 9 and Schedule 3 of the NSNA.
- 4.2.6 It was also observed that the test of 'reasonable cause for annoyance' in Schedule 3 of the NSNA appears to be more stringent than that in the LLAA (replacing what might be regarded as a subjective test with an objective one).

²⁷ See <http://www.opsi.gov.uk/acts/acts2005/50016--k.htm#69>.

- 4.2.7 Sections 69 – 79 of the CNEA will give local authorities, as of spring 2006, the power to designate areas as 'alarm notification areas'. They must advertise their intention of designating an area as such, and allow at least 28 days for representations to be made to the local authority. Once they have decided to proceed with the designation, they must advertise the date on which the designation will have effect, giving at least a further 28 days notice. Those in alarm notification areas with intruder alarms must nominate and register a key-holder for those premises with the local authority. This can be an individual or a key-holding company. Failure to register key-holder details can result in a maximum fine upon summary conviction of £1,000. The local authority may give the offender the option of discharging liability to conviction with the payment of a fixed penalty notice of £75, or a level set by the local authority. If an alarm misfires for 20 minutes continuously, or an hour intermittently, an Environmental Health Officer can obtain the key-holder details to enter premises without force, or if not possible to obtain these details can enter without force if this is still possible, and if the alarm is giving 'reasonable cause for annoyance' to those in the vicinity. They can enter by force if a warrant is obtained.
- 4.2.8 The provisions of the Code of Practice, the LLAA 1991, the (unimplemented) provisions of the NSNA 1993, and the provisions in the CNEA 2005 are compared in **Table 4.1**.

Table 4.1 Comparison of Principal Provisions in Code of Practice, LLA 1991, NSNA 1993, and CNEA

Code of Practice	LLAA 1991 S23 (repealed by the CNEA)	NSNA 1993 (parts not implemented – section 9 and Schedule 3 repealed by the CNEA)	Clean Neighbourhoods and Environment Act 2005
1 Installation, maintenance, reliability, and testing			
Conform to relevant BS or comparable standard	No provisions	Regulations not drafted but these could cover installation and maintenance	No provisions
2 Identification of alarms			
Visual indicator	No provisions	Regulations not drafted but these could cover installation and maintenance	No provisions
3 Automatic cut-out devices			
20-minute cut-out desirable. If necessary, use CoPA [sic] to enforce fitting after incident(s).	20-minute cut-out mandatory.	Regulations not drafted but these could cover installation and maintenance	No provision but see also noise standard - below
4 Key-holders			
Nominate to police within 48 hours of installing or taking over an alarm of alarmed premises	Nominate to police (for LA see below)	Nominate to police (for LA see below)	Nominate to LA within 28 days .
At least 2; can include occupier, or an alarm company	2 people (other than occupier) or 1 alarm company.	2 people (other than occupier) or 1 alarm company.	1 person other than the occupier, or a key-holding company.
Notify LA (at same time as nomination to police) that alarm is installed, and of police station with key-holder data	Notify LA within 48 hours of installing an alarm, or before operation when taking over an alarm, that premises are alarmed, and of police station with key-holder data.	Notify LA within 48 hours of installing an alarm, or before operation when taking over an alarm, that premises are alarmed, and of police station with key-holder data	
Notify changes to police within 24-	Notify changes to police (no time	No explicit provision, but key-	Notify changes to LA within 28

Code of Practice	LLAA 1991 S23 (repealed by the CNEA)	NSNA 1993 (parts not implemented – section 9 and Schedule 3 repealed by the CNEA)	Clean Neighbourhoods and Environment Act 2005
hrs <i>Occupiers with existing alarms not obliged to register</i>	limit) <i>Provisions to require occupiers with existing alarms to register</i>	holders must be 'current' <i>Provisions would require occupiers with existing alarms to register</i>	days. <i>Provisions to require occupiers with existing alarms to register</i>
5 Noise Standard			
Statutory nuisance under COPA	Additional power for LA to deactivate alarm if operating for > 1 hr and is causing annoyance to persons living or working near the premises (see Warrants below).	Additional power for LA to deactivate alarm if operating for > 1 hr and gives persons living or working in the vicinity of the premises reasonable cause for annoyance (see Warrants below).	Additional power for LA to deactivate alarm if operating for > 20 minutes continuously or > 1 hr intermittently, keys for the property cannot be obtained, and gives persons living or working in the vicinity of the premises reasonable cause for annoyance. (see Warrants below).
6 Warrants			
N/A	Application must be made to a JP for a warrant to permit entry to the premises and entry must be accompanied by a constable	An authorised officer may enter without a warrant or a constable, provided no force is used Application must be made to a JP for a warrant to permit entry to the premises and entry must be accompanied by a constable	An authorised officer may enter without a warrant or a constable, provided no force is used Application must be made to a JP for a warrant to permit entry to the premises and entry need NOT be accompanied by a constable

4.2.9 A ninth London Local Authorities Bill is currently before Parliament.

Relevant British and European Standards

4.2.10 The current situation with regard to standards is not straightforward. BS4737, referred to in the 1982 Code, is a multi-part document, the components of which differ in their publication date and current status; some of the 27 parts have been withdrawn.

4.2.11 British representatives have been involved in drafting a European Standard on audible alarms. The European Standard (EN 50131-1) is also a multi-part document and although some parts have been published, others are only in draft, or are yet to be started.

4.2.12 However, the British Standards' Institute's (BSI) rules require that a British Standard be withdrawn (after a period of overlap) if there is a European Standard covering the same topic.

4.2.13 The British Standards' Institute (BSI) has therefore produced PD 6662:2004 to enable the use of published and draft European Standards in advance of the final versions of all parts (of the European Standard) being available. The document PD 662:2004 is a 'Published Document' (PD) of BSI, not a British Standard. In this transition period, the effect of PD 662:2004 is to establish the draft version of EN5013-1 that was issued for comment (designated prEN 50131-1) as the document to which those specifying systems should refer until the revised (and final) version of EN 50131-1 is implemented as a British Standard.

4.2.14 Consequently, any revision to the Code of Practice would need to refer to PD 6662:2004 pending the publication of a new BS EN 50131-1. The timescale for this is not certain.

Types of Alarm and Alarm Registration

4.2.15 The police service is principally concerned with what are classified in the Policy issued by the Association of Chief Police Officers (ACPO) of England Wales and Northern Ireland²⁸ as Type A – Remote Signalling Systems. Type A systems connect to an Alarm Receiving Centre (ARC) and might not necessarily have a locally sounding indicator of having been triggered. Such systems are issued with a Unique Reference Number (URN) and there is protocol that determines the level of police intervention in case of the system triggering.

4.2.16 Activation of Type A systems will lead to automatic notification of the police but the period before they attend is not guaranteed.

4.2.17 The ACPO Policy also defines Type B – Security Systems. These do not connect to an ARC and are not issued with URNs. When a Type B system has been activated, the police will only attend if called out by a third party able to confirm that an offence is (believed to be) in progress.

²⁸ ACPO Security Systems Policy 2004. Downloadable from the ACPO website: www.acpo.police.uk/policies

- 4.2.18 Because of the different regimes governing the monitoring, identification, and response to the triggering of the two classes of alarm, it is assumed that Type B systems are more likely to be the main cause of call outs to LAs in respect of noise from a sounding alarm.
- 4.2.19 It does not appear that the 1982 Code of Practice conflicts with any of the provisions of the ACPO Policy, but there is the potential for confusion of the registration systems for key-holders under the ACPO Policy and the Code of Practice. Though they are similar, they serve different purposes and lead to differing responsibilities and action by the police. Registration under both schemes might be required.
- 4.2.20 Since the 1982 Code was approved, the Data Protection Act 1998 (DPA) has come into force. The application of the DPA to registration schemes that require details of owners, occupiers, and key-holders for premises has not been investigated. However, it has been assumed that such schemes are subject to the provisions of the Act. Advice or reference to policy applying to similar registration schemes could be referred to in any amended Code of Practice.

Updates required to references in the Code to Statutes and Standards

- 4.2.21 From the foregoing comments, it is apparent that most of the statutes and standards referred to in the Code have been superseded or supplemented by later documents.
- 4.2.22 The items in **Table 4.2** are therefore proposed to update the Code.

Table 4.2 Recommendations for updating Audible Intruder Alarms Code

Item	Recommendations for updating Audible Intruder Alarms Code
1	References to CoPA should be amended to refer to the relevant sections of the EPA
2	References to BS 4737 should be amended to refer to BSI PD 6662:2004 but this reference should be reviewed closer to any proposed revision to determine when BS EN 51031-1 will become available
3	Reference should be made to the ACPO Policy
4	Reference should be made to the Clean Neighbourhoods and Environment Act 2005.

- 4.2.23 Depending on the outcome of the 9th London Local Authorities Bill, considered in conjunction with the Clean Neighbourhoods and Environment Act 2005, it might become necessary to fully update the Code to reflect the new powers and provisions in these pieces of legislation.

4.3 Local Authority Consultation

Approach and Response to Local Authority Consultation

- 4.3.1 Several methods were used for the LA consultation.

- 4.3.2 Initially direct approaches were made to officers in cases where they or their Authority were known to the practice. The project scope was outlined and those who expressed willingness to contribute to the study were then sent an email giving further details and invited to set a time for a one-to-one telephone discussion.
- 4.3.3 Further direct approaches and follow-up emails were made at the Institute of Acoustics Autumn Conference. Emails were also sent to EH staff who had confirmed via an intermediary (e.g. member of a Local Pollution Control Group) their willingness to be contacted regarding the study.
- 4.3.4 Finally, a questionnaire was posted on the web for completion online (see Appendix A). The contact methods and outcomes are presented in **Table 4.3** (in some cases more than one officer was contacted at the same authority where the initial contact gave contacts details for colleagues to be contacted instead of, or in addition to, themselves).

Table 4.3 Local Authorities contacted, method, and outcome

Local Authority Contacted	Officers Call or meeting Plus follow up email	first Email only	Telephone discussion or on-line form completed
Totals	34	19	15

- 4.3.5 Four of the initial contacts called back for a fuller discussion, as did two of the officers approached at the Institute of Acoustics conference. Because of this limited response, those direct contacts that had not responded were emailed with the link to the online questionnaire asking them to complete that if it was more convenient. This resulted in a further online form being completed. Further contacts via local EHO groups and Defra were pursued and this led to 3 more on-line forms being completed.
- 4.3.6 Five more authorities responded via the online form without having been previously contacted, presumably in response to the Press Release in Environmental Health News. The full list of the 15 responding LAs is in **Table 4.4**, which also classifies the area as Urban or Non-Urban.
- 4.3.7 The criterion used for this classification is taken from the AEA Technology report for the then DETR on defining agglomerations²⁹. This was produced as part of the Department's studies concerning the EU Directive on the Assessment and Management of Environmental Noise (COM2000 468). The report refers to the definition of urban land in the 1991 Census of Key Statistics for Urban and Rural Areas – ONS 1991. This definition specifies that land may be considered to be urban if the population density per km² is in excess of 500 persons.

²⁹ Identifying the Options Available for Determining Population Data and Identifying Agglomerations in Connection with EU Proposals Regarding Environmental Noise. A report produced for Department of the Environment Transport and the Regions, The Scottish Executive, The National Assembly for Wales and Department of Environment for Northern Ireland. January 2001.

4.3.8 Data on the type of each Local Authority, its population, and area were obtained from the following websites:

- <http://www.psr.keele.ac.uk/area/uk/cc.htm>
- <http://www.psr.keele.ac.uk/area/uk/lc.htm>
- <http://www.psr.keele.ac.uk/area/uk/dc.htm>
- <http://www.psr.keele.ac.uk/area/uk/mc.htm>,
- <http://www.psr.keele.ac.uk/area/uk/uc.htm>
- <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-population>
- <http://www.nationmaster.com/encyclopedia/List-of-English-districts-by-area>

Table 4.4 List of all Local Authorities responding

Authority	Type	Predominant Character
Birmingham City Council	Metropolitan	Urban
Bristol City Council	Unitary	Urban
Cotswold District Council	District	Non-Urban
Dudley MBC	Metropolitan	Urban
Hart DC	District	Non-Urban
London Borough of Greenwich	London Borough	Urban
Luton BC	District	Urban
North Herts DC	District	Urban
Northampton BC	District	Urban
South Northants DC	District	Non-Urban
Stockport MBC	District	Urban
Stratford-upon-Avon DC	District	Non-Urban
Waverley BC	District	Non-Urban
Wealden DC	District	Non-Urban
Worcester City Council	District	Urban

Findings of Local Authority Consultation

4.3.9 Although only a small number of those directly contacted responded formally, most of those contacted considered that noise from audible intruder alarm was a problem in their area. This was mirrored in the formal responses in which all 15 LAs considered such alarms were a problem.

4.3.10 **Table 4.5** summarises the answers to the principal questions by those who responded in detail by telephone or online.

Table 4.5 Responses to Principal Questions re Audible Intruder Alarms

Question	Yes	No	No of responses
Complaints in past year	15	0	15
Consider it a problem	15	0	15
Use the Code (or local procedure based on it)	(9+4) = 13	1	14

Question	Yes	No	No of responses
Code is Effective	3	9	12
Status enhances effectiveness	9	4 (Makes no difference)	13

- 4.3.11 It can be seen that most responding LAs use the Code (or have a local procedure based on it), though only 25% of those responding thought the Code was effective. Nevertheless, most respondents thought that its approved status enhanced its effectiveness.
- 4.3.12 Further comments were obtained as part of the survey and these are discussed in paragraph 4.3.18. Based on these responses and other comments it is possible that the apparent contradictions in the responses described in the preceding paragraph (to this one) can, in part, be reconciled as follows.
- 4.3.13 One of the main reasons that the Code is regarded as ineffective is that the registration system for key-holders is not operating effectively with the result that contact information is at best sparse and likely to be out-of-date, and in many cases effectively non-existent.
- 4.3.14 On the other hand, where an LA has incurred costs in abating a nuisance from a misfiring alarm, breach of the Code's provisions for key-holder notification can be cited in correspondence accompanying any invoice presented to the occupier to recover those costs.
- 4.3.15 Complaint statistics for alarms were obtained for the previous year in almost all cases; however, the basis for the figures varied. Some LAs reported the number of complaints received concerning misfiring alarms separately for residential and non-residential premises. Other LAs provided data for the total number of complaints but not the split between the two types of property, though in some cases an estimated split was given. Finally, the total number of complaints reported by some LAs was based on an estimate by the officer concerned where their system did not record such details. These figures are summarised **Table 4.6**.

Table 4.6 Summary of data on complaints from responding LAs

Annual Values	Residential Premises	Non-Residential Premises	All Premises
Total	772	289	1104
Mean	59	26	79
Maximum	230	76	306
Minimum	5	2	7
No of LAs responding	13	11	14

Note. The data in the table are raw numbers, not corrected for population or surface area.

- 4.3.16 The survey found that there is a very wide range in the numbers of complaints received by different LAs. The LAs that are predominantly urban have the highest number of complaints about alarms; typically equivalent to about 1 or 2 per week. The highest incidence reported was about 6/week; about 8% of the total numbers of noise complaints in the area covered. However, for the small sample of data available, the rate of complaint (i.e. numbers of complaints per 100,000 population) does not appear to be strongly related to either the population in the area, or to the population density.
- 4.3.17 Those LAs that considered the Code to be effective had lower numbers of complaints than most of those that thought the Code was ineffective. However, the LA with the lowest number of complaints considered the Code to be ineffective.
- 4.3.18 Many of the LAs responding suggested changes for the Code, and these can best be appreciated by understanding the problems encountered by LAs in dealing with alarms (**Table 4.7**).

Table 4.7 Problems encountered and changes proposed by LAs

Topic	Proposals/Comments
Scope of Code	
Problem	Extend Scope of Code
Code covers audible intruder alarms incorporating audible signaling which is clearly audible outside the premises protected.	Other types of audible alarm are encountered e.g. smoke detectors, fire alarms. Disturbance can be caused by internally located sounders if there is an adjoining property, even if the noise is not clearly audible outside the premises.
Key-holder Registration and Database	
Code proposes registration with the local police station and advising the LA of where the details are kept	
Problems	Proposals
Police now have central control systems not local control.	Key-holder registration should be compulsory.
Most forces have disposed of their records. Remaining records are not up-to-date.	Database could be kept by police, LAs or third party, as long as LAs have access to it (including out-of-hours).
LAs have some records but these are not usually up-to-date, or comprehensive, and might not be accessible out-of-hours.	Database must be maintained which means there is an ongoing cost (and Data Protection issues).
Most complaints are about alarms on residential premises for which there might be any key-holder registration anywhere.	Registration forms could be distributed to housing developers, many of whom provide an alarm with a new house. This form could then constitute part of the 'conveyancing pack', which might then be more likely to be passed on when the house is sold to subsequent owners so that they could register the changed details.
Ownership of industrial/commercial premises that have been closed up (but with an active alarm) can be difficult to establish.	
Installation, maintenance, and reliability	
Code proposes conforming to the relevant British Standard which requires that a maintenance contract is taken out	
Problem	Comment

Topic	Proposals/Comments
<p>Most complaints are about alarms on Is it reasonable to require a householder to incur the residential premises for which there might not costs of a maintenance contract? Perhaps key-holder be any maintenance contract and/or the registration is adequate. installation might have been DIY.</p>	
<p>Automatic cut-out devices</p>	
<p>Code proposes that a 20-minute cut-out device is fitted</p>	
<p>Problem</p>	<p>Proposal</p>
<p>In most cases, the alarm sounds again after Cut-outs should not permit retriggering (but this might an indeterminate period. This can make it not be effective in all fault conditions). difficult for EH staff to witness the noise so as to decide what further action to take.</p>	

Powers of Entry and Warrants

- 4.3.19 The Code does not provide for powers of entry or the issue of warrants; these are covered by the EPA 1990, the LLAA 1991, and the unenacted parts of the NSNA 1993. Nevertheless comments and queries about this topic were raised in the course of the consultation and are reported here since they are an important factor in the abatement of noise from audible alarms.
- 4.3.20 The EPA gives authorised officers powers of entry on demand at any reasonable time to non-residential premises. Entry to residential premises requires that 24-hours notice is given except in an emergency. The LLAA 1991 does not add to this power. The unenacted (and repealed) part of the NSNA 1993 gives a power of entry for **any** premises where the alarm has been sounding for more than 1 hour and its sounding gives persons working or living in the vicinity reasonable cause for annoyance.
- 4.3.21 In neither of the above cases is entry by force authorised. For entry requiring force, a warrant is required. The EPA, LLAA, and NSNA lay down procedures and requirements under which a JP can issue a warrant authorising entry by force to silence an alarm.
- 4.3.22 In many cases, it seems that an alarm can be silenced without entering the building to which the alarm is fixed and that it is only necessary to disconnect the sounder within the alarm box. Some LAs perform this procedure without first requesting a warrant on the basis that they are not entering the building³⁰.
- 4.3.23 Other LAs, acting on the advice of their legal department will obtain a warrant even for making an external disconnection of an alarm.

³⁰ They will have first satisfied themselves that there is a problem eg by reference to the Code and/or the EPA, have taken reasonable steps to locate a key-holder, and have carried out any other requirements eg concerning service of a Notice under the EPA.

- 4.3.24 The time taken to silence an alarm by external disconnection is limited to the time taken for the officer to assess the situation, fail to locate key-holders, and secure the attendance of an alarm specialist, who would typically have a call-out arrangement with the LA. The additional time required to obtain a warrant can be several hours during which time the alarm is continuing to sound and the officer is not available to deal with other work. (This can be a particular problem for an out-of-hours service, which would normally utilise two officers).
- 4.3.25 Clarification of the circumstances in which warrant is required was requested by respondents.
- 4.3.26 All LAs have procedures for obtaining warrants where they need to enter a building to silence an alarm whether it is an external sounder, or as sometimes occurs, an auxiliary internal sounder.
- 4.3.27 In some cases a warrant for entry into residential premises might be issued on the understanding that it will not be enforced until some further period of time has elapsed (perhaps several hours) in order to confirm that the occupier is not returning that evening.
- 4.3.28 All the responding LAs invoice the occupier for the costs incurred in silencing alarms. This includes some element for officer time, plus the cost of an alarm specialist and a locksmith. Respondents reported few cases where there was any difficulty in obtaining payment. Some LAs cite the Code and its approved status in the covering letter sent with the invoice.
- 4.3.29 Owners of non-registered alarms can face a bill of the order of £60 to £120 to defray the LA's costs. There might also be some inconvenience. The proposal to encourage or impose registration on alarm owners pointed out that drawing owners' attention to the potential to save themselves cost and disruption, could be useful way of increasing the numbers registering.

Health and Safety Issues

- 4.3.30 There was some concern that alarms seem not to be regarded as a signal that there is potentially an intruder on the premises, but merely as a noise issue.
- 4.3.31 The police policy is only to attend Type B alarms if there is positive evidence that there are intruders on the premises. There are some health and safety issues for EH staff attending without police presence since there could still be intruders on the premises or in the vicinity, and EH staff might be the first at the site.
- 4.3.32 Attending alarms in some areas e.g. industrial estates, particularly if they are boarded up, or at night, also have health and safety implications.

4.4 Consultation with trade bodies

Trade Bodies Consulted and Comments Received

- 4.4.1 The Association of British Insurers (ABI) operates a scheme in conjunction with the ACPO³¹ Policy on Security Systems that leads to UKAS certification of alarm installers. They directed us to the British Security Industry Association (BSIA).
- 4.4.2 The British Security Industry Association (BSIA) works closely with the Police (e.g. ACPO) in order to reduce the number of misfiring alarms. The supervision of the alarm installers is carried out by two accredited bodies - the National Security Inspectorate (NSI) and the Security Systems and Alarm Inspection Board (SSAIB).
- 4.4.3 Both the NSI and SSAIB were contacted for comment. In particular, their views were sought on the current operation and holding of databases and whether Type B alarms might be accommodated within existing database.
- 4.4.4 From comments made by the NSI and BSIA the situation appears to be as follows.

Automatic Cut-out Devices

- 4.4.5 It is believed that (as regards NSI approved installers) 20-minute cut-outs are presently fitted routinely to most, if not all, intruder alarm systems be they local audible-only alarms or ones with remote signalling. The present regime of standards is the British Standards regime (BS 4737 etc). These standards do not make it mandatory to have 20-minute cut-outs, but it is general industry practice to do so.
- 4.4.6 The UK is however now in the process of a one-year transition period towards the introduction of European Standards for intruder alarms (EN 50131 series etc, as implemented by British Standards Institution Published Document (PD) 6662: 2004)³².
- 4.4.7 Sub-clause 8.6 of Draft European Standard prEN 50131-1: 2004 states:

"Audible warning devices shall operate for a minimum of 90 seconds unless a shorter period is demanded by local or national regulations. The maximum operating period shall be 15 minutes unless a shorter period is demanded by local or national regulations".

- 4.4.8 The existence of a requirement for a 15-minute cut-out in the prEN means that all intruder alarms installed under the PD 6662 scheme (implementing prEN 50131-1:2004) will need to have a 15-minute cut-out in order to comply.

Key-holder Databases

- 4.4.9 There is a very well managed sector of the industry involving intruder alarms that signal remotely to 24-hour operated Alarm Receiving Centres (ARCs). Keeping key-holder information up-to-date is always an on-going process, and the ARCs, in conjunction with alarm installers and their customers are, constantly working to maintain accurate information.

³¹ The ACPO was not consulted but reference to their policy on alarms is made in **Section 4.2**.

³² See also Paragraphs 4.2.10 to 4.2.14 which deal with British and European Standards.

- 4.4.10 As soon as one moves away from this remote signalling sector (mainly Type A alarms on police response), the holding of key-holder information tends to be fragmented. Alarm companies used to inform the police of key-holder information and the police used to keep records, though of course maintaining accurate on-going key-holder information was always an administrative problem. Nowadays, the police themselves are standing away from holding key-holder databases and some forces (e.g. Surrey Police) have promoted voluntary schemes operated by independent third parties.
- 4.4.11 It is believed that many databases are held by the large alarm companies (for their own installations) but that there are also specialist ARCS set up to serve groups of smaller alarm companies who do not operate their own facilities. There are thought to be dozens of ARCs.
- 4.4.12 It is very doubtful that existing databases of key-holders are divided geographically, align with local authority areas, or provide national coverage. It is believed to be very complex to relate individual premises to local authority areas and, Post Codes do not provide the answer.
- 4.4.13 It is not known whether existing databases could accommodate Type B alarms.

4.5 Consultation with professional organisations

- 4.5.1 The final element of consultation was intended to elicit a professional view on two matters. Firstly, the question of the 'adopted' status of the Code and whether it was an important factor in the Code's effectiveness. The second matter was the procedures surrounding the issuing of warrants and was the main aim of the extension to the study described in Paragraph 4.1.4.
- 4.5.2 The following bodies were contacted in relation to the first topic (the status of the Code): the Local Government Lawyers Group of the Law Society, the Justices' Clerks' Society, and the United Kingdom Environmental Law Association (UKELA), however, no comments were received on this topic.
- 4.5.3 The extension to the survey took the form of a further on-line questionnaire (see Appendix A) and this was completed by 12 members of the Justices' Clerks' Society.
- 4.5.4 A copy of the questionnaire was also supplied to the Magistrates' Association and considered at a meeting of their Judicial Policy & Practice Committee.
- 4.5.5 Only one member of that committee had been involved in the process of issuing warrants to authorised LA officers to enter premises by force to silence an intruder alarm in the past year and that was outside normal working hours. She was not aware of the existence of the Code of Practice, but thought that the provision [proposed in the Clean Neighbourhoods and Environment Bill] that would permit a warrant to be issued if the alarm has been sounding continuously for more than 20 minutes and intermittently for more than 1 hour would make the decision to issue a warrant more straightforward.

- 4.5.6 The members of the Justices' Clerks' Society who responded were in a range of locations, some of which covered more than one Local Authority area. In some cases, the different LAs were specified and from the available data, the type of LA was determined. Where possible the areas were also classified as Urban, or Non-Urban, using the test described in paragraph 4.3.7.
- 4.5.7 The results of this analysis are shown in **Table 4.8**.

Table 4.8 Type of LA covered by respondents to second questionnaire

County	Unitary	Metropolitan	District	London Borough	Total
2	4	2	13	1	22
Urban		Non-Urban			Total
13		7			20

- 4.5.8 The responses to the principal questions in the second questionnaire are summarised in **Table 4.9**.

Table 4.9 Summary of responses to second questionnaire

<i>Topic</i>	<i>Response</i>
Experience of issuing warrants	Most respondents had been involved in issuing warrants, but only about half of these were in the past year. In almost all of those cases, the warrants had been issued out-of-hours. Where warrants had been issued in the past year, the average number was 3.
Is the Code's status important in the process	Two-thirds of all respondents thought it was important, but only half of those who had issued warrants in the past year thought so.
Effect of delay in applying for warrant	Equal numbers of all respondents (1/3) considered it: a) not important b) a factor to consider, and c) very important Of those who had issued warrants in the past year, only 1 thought it very important.
Would criteria proposed in the Clean Neighbourhoods and Environment' Bill (in relation to disturbance) be helpful	Three-quarters of all respondents thought that these criteria would make the decision to issue a warrant more straightforward. Two-thirds of those who had issued a warrant in the past year thought so.

- 4.5.9 The questionnaire provided an opportunity for comment about improving the process for the issuing of warrants, but most respondents did not make a comment, or thought that the system worked reasonably well.
- 4.5.10 Respondents did suggest that the LA should not wait until the early morning to apply for a warrant if the alarm had been sounding earlier in the day, and that the LA should alert the local court during normal hours to the potential for a warrant being the required out-of-hours. This could be more convenient for both court officials/magistrates and the LA officers.

4.6 Conclusions

- 4.6.1 Complaints about alarms on non-residential premises accounts for a significant proportion of the total, but it is not known what proportion of these are Type B alarms – i.e. not connected to an ARC.
- 4.6.2 Most complaints relate to alarms on residential premises, but it is not known what proportion of these have been installed by a registered firm, are covered by a maintenance agreement, or are connected to an ARC.

- 4.6.3 The ACPO Policy imposes performance standards on Type A alarms relating to their reliability and incidence of misfiring. If the standards are breached, the police response is downgraded and improved reliability must be demonstrated to secure the normal levels of police response to Type A systems. It is assumed that this regime acts as an incentive to provide good standards of installation and maintenance, which should minimise the incidence of misfiring.
- 4.6.4 Thus, in the case of Type A alarms, it seems unlikely that any further actions or requirements would result in a significant reduction in misfiring, since their installation etc is already overseen by a system that seeks to reduce unreliable operation.
- 4.6.5 A better understanding of, and access to, the proprietary key-holder databases (subject to Data Protection considerations) could improve LAs' ability to silence misfiring Type A alarms. However, this is not a matter that can be addressed by the Code.
- 4.6.6 As regards Type B alarms, a number of actions have the potential to improve the situation.
- 4.6.7 Firstly, there is the question of installation and maintenance. Increasing numbers of private houses have alarms³³, but it is not known how many of these are professionally installed or are DIY systems (i.e. from a manufacturer's kit). Occupiers having alarms without a maintenance contract appear to be in breach of the existing Code³⁴. However, it is questionable whether such cover could be obtained for a DIY installation. (One possibility might be for the suppliers of DIY kits to arrange for a maintenance contract, but the practicability of this has not been investigated.)
- 4.6.8 The second matter is key-holder registration and the resultant database. Any useful system must deal with the following situations:
- a An existing occupier installing an alarm in hitherto unprotected premises
 - b An occupier taking over premises that are already alarmed (and might or might not be registered)
 - c Existing occupiers of alarmed premises that have not been registered
- 4.6.9 The Code of Practice only addresses the first two cases. However, all three circumstances are covered by provisions in the LLAA 1991, the NSNA 1993, and the CNEA (although it should be remembered that the CNEA repeals sections of the LLAA and the NSNA)³⁵. Owing to the lack of a current comprehensive database covering Type B installations, if any change to the requirements to register key-holders (e.g. making it compulsory even for private householders) is to be effective, it needs to take account of premises in which there has been no change to the occupancy or the alarm.

³³ The proportions of households with burglar alarms increased from 18 per cent to 27 per cent between 1994 and 2001/02. Social Trends 34. ONS.

³⁴ On the basis that the British Standard requires such a contract. As has been mentioned, the status of the British Standard is uncertain, and the provisions of the final European Standard will not be known for some time.

³⁵ The 9th London Local Authorities Bill only seeks to amend the *process* of registration under the LLAA 1991 and not the situations covered.

- 4.6.10 Alternatives to compulsory registration include a scheme as operated by one respondent LA whereby housing developers pass on registration forms to their purchasers, to ensure initial registration of alarms and potentially leading to revised forms being completed as part of the house-buying process. However, this would not address the problem of existing premises for which key-holders are either not registered, or any details are not accessible to the relevant LA (including out-of-hours).
- 4.6.11 If action to register existing occupiers is contemplated, then a possible conduit for forms etc might be Neighbourhood Watch schemes. Coincidentally these were first established in 1982, and in 2003 there were 160,000 schemes in operation. However, these only cover about a quarter of households in the United Kingdom ³⁶.
- 4.6.12 An approximate estimate of the number of alarms installed in private homes can be made by considering the following information:
- In Spring 2003 there were 24.5 million households in Great Britain ³⁷
 - In England 71% of homes were owner-occupied ³⁸(and hence more likely to be permitted to fit an alarm than for other forms of tenure)
 - In 2002 27% of homes had alarms
- 4.6.13 If the number of household in England is assumed to be 15 million, then the potential number of homes with alarms is $15 \text{ million} \times 71\% \times 27\% = 2.8 \text{ million}$.
- 4.6.14 It is clear than any registration scheme for existing premises would not be a trivial exercise.
- 4.6.15 Thirdly, the exact mode of operation of automatic cut-out devices could be reviewed to avoid alarms retriggering at some period after the cut-out has activated. A change of this kind might require consultation with insurance organisations.
- 4.6.16 Fourthly, the scope of the Code (or any amended one) could be extended to cover other types of audible alarm and internal sounders where they cause an unacceptable degree of disturbance.
- 4.6.17 Although outside the scope of the Code, clarification of the circumstances in which warrants are required when a LA is abating a nuisance or acting to enforce the provisions of the Code would be welcomed by LAs.

4.7 Recommendations and findings of the study

- 4.7.1 This section:
- 1 Provides recommendations relating to the currency of the codes and any changes that are required.
 - 2 Reports on the on the findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

³⁶ Op cit.

³⁷ Census, Labour Force Survey, Office for National Statistics.

³⁸ Office of the Deputy Prime Minister.

- 4.7.2 Owing to the continuing development of the European Standard on Audible Intruder Alarms, the recent passage of the Clean Neighbourhoods and Environment Act 2005 and the impending passage of the 9th London Local Authorities Bill, recommendations on changes to the Code to maintain currency cannot be final. Against that background, it is recommended that the changes set out in **Table 4.10** be put into effect if the Code of Practice on Noise from Audible Intruder Alarms is revised.

Table 4.10 Recommendations for updating the Audible Alarms Code

Item	Recommendations for updating the Audible Intruder Alarms Code
1	References to CoPA should be amended to refer to the relevant sections of the EPA.
2	References to BS 4737 should be amended to refer to BSI PD 6662:2004 but this reference should be reviewed closer to any proposed revision to determine when BS EN 51031-1 will become available.
3	Reference should be made to the ACPO Policy.
4	Reference should be made to the Clean Neighbourhoods and Environment Act 2005 and the 9th London Local Authorities Bill

- 4.7.3 Note that items 2 and 4 in **Table 4.10** are dependent on the outcome of processes outside the control of Defra.
- 4.7.4 In practice, the Clean Neighbourhoods and Environment Act 2005 will require the Code of Practice to be redrafted to reflect changes in the key-holder registration scheme (eg permitted period, registration direct with LA and not police, and extension of the notification requirement to cover existing premises where there is currently no key-holder registration). Any revised Code would also need to provide guidance to LAs for those parts of their district that had not been designated alarms registration notification areas.
- 4.7.5 A number of substantive changes could be made to the Code but these are policy decisions. These matters are:
- If they have not already been addressed by then, policy decisions might also be required whether private houses should be required to have a maintenance contract for an alarm, how should DIY installations be treated
 - Extension of the scope to cover audible alarms other than intruder alarms, and
 - Alarms that are not audible outside the premises in which they are fitted but cause disturbance to adjoining premises
- 4.7.6 Although not a matter directly addressed by the Code, the circumstances in which warrants are required (when abating a nuisance from a misfiring alarm) and procedures for obtaining them (in particular out-of-hours) were topics of concern to many LA respondents, although court officials considered that existing arrangements worked reasonably well. Legal guidance from Defra on the requirements for warrants would ensure consistency in approach. Defra could also consider facilitating a forum (e.g. at a conference dealing with a range of noise issues) for LA officers and court officials from different areas to share practical warrant issuing procedures.

- 4.7.7 The study found that all LAs considered that this noise source was a problem in their area. Although few respondents thought that the Code was effective, most of them considered that its approved status enhanced its effectiveness. Two-thirds of members of the Justices' Clerks' Society who responded also thought the adopted status was a factor in the warrant issuing process.
- 4.7.8 All LAs that responded, reported complaints of noise from this source in the past year. Despite their low rating of the Code's effectiveness, most respondents used the Code or a local procedure based on it. This information, taken with the numbers of complaints reported by the respondents, suggests that the use of Code is both widespread and frequent.

5 SUMMARY OF RECOMMENDATIONS AND FINDINGS

5.1 Introduction

5.1.1 This section reproduces the sections for all three Codes of Practice describing:

- 1 The recommendations relating to the currency of the codes and any changes that are required
- 2 The findings of the study in relation to:
 - 'adopted' status
 - usage of the codes

5.2 Code of Practice on Noise from Ice-Cream Van Chimes Etc 1982

5.2.1 If the Code of Practice on Noise from Ice-Cream Van Chimes Etc is revised, it is recommended that the changes set out in **Table 5.1** (= **Table 2.6**) be put into effect.

Table 5.1 Recommendations for updating Ice-Cream Van Chimes Code

Item	Recommendations for updating the Ice-Cream Van Chimes Etc Code
1	Include reference to availability of powers to deal with noise in street under EPA as amended by NSNA, and note that CoPA has been amended (though the relevant provisions are unchanged).
2	Refer to current Standard in relation to Sound Level Meters - BS EN 61672-1:2003.
3	Specify that a windshield should be used for all measurements.
4	Specify that the equipment should be calibrated before and after any measurements.
5	Specify that the equipment should be calibrated by an independent testing organisation at least every two years.
6	Specify that a measurement height of 1.2 to 1.5 m above ground should be used (if at ground level).

5.2.2 The recommendations in **Table 5.1** could be implemented without requiring any further technical work.

5.2.3 Additional proposals are included in **Table 5.2** (= **Table 2.7**), but further technical work would be required before they could be considered.

Table 5.2 Proposals for updating the Ice-Cream Van Chimes Etc Code

Item	Proposals for updating the Ice-Cream Van Chimes Etc Code
7	Measurements could be permitted above ground level where it is appropriate to do so (e.g. flats, measuring on a balcony?).
8	Measurements should normally be carried out under free-field conditions unless circumstances make this impractical or inappropriate, in which case the result might need to be corrected for reflection from nearby surfaces.

- 5.2.4 The study found that most LAs considered that there was no problem from this noise source in their area and hence no requirement to take legal action. However, most of the LAs that expressed a view considered that the approved status of the Code enhanced its effectiveness. Out of court, the status can be referred to when communicating with operators of vans about which noise complaints have been received, or have been observed infringing the terms of the Code.
- 5.2.5 There were few complaints reported in most LAs for this noise source and this could lead to the conclusion that the Code would be little used. However, though it might be used infrequently in a given LA (since there are likely to be relatively few relevant complaints), the use is likely to be widespread. Indeed, it was regarded as being 'used' even by LAs where there were no recorded complaints about Ice-Cream Van Chimes in the past year. Thus, the Code should be regarded as more frequently used than the low complaint rate for this source initially suggests.

5.3 Code of Practice on Noise from Model Aircraft 1982

- 5.3.1 If the Code of Practice on Noise from Model Aircraft is revised, it is recommended that the changes set out in **Table 5.3** (= **Table 3.8**) be put into effect.

Table 5.3 Recommendations for updating the Model Aircraft Code

Item	Recommendations for updating the Model Aircraft Code
1	Include an Annex summarising the specific and/or quantitative guidance in the Code.
2	Update reference from CoPA to EPA.
3	Refer to current Standard in relation to Sound Level Meters - BS EN 61672-1:2003.
4	The grade of meter should be specified.
5	Specify that a windshield should be used for all measurements.
6	Specify that the equipment should be calibrated before and after any measurements.
7	Specify that the equipment should be calibrated by an independent testing organisation at least every two years.
8	Refer to the need to check whether planning permission is required.
9	Refer to the need to check whether the Local Authority are aware of any Byelaws affecting the land in question which might impose additional restrictions.

- 5.3.2 The recommendations in **Table 5.3** could be implemented without requiring any further technical work.
- 5.3.3 Additional proposals are included in **Table 5.4** (= **Table 3.9**), but further work would be required before they could be considered. Items 10 to 11 would not require further technical work, whereas items 13 – 19 would necessitate additional research before any change could be considered.
- 5.3.4 Given the apparently low incidence of reported complaints from this source of noise further investigations are probably not justified save in respect of item 18 (permitted noise level for gas-turbine-powered models specified in test procedure).

- 5.3.5 Currently it is possible that gas-turbine-powered models are, in practice, subjected to a more stringent test than other powered model aircraft. It is not known whether this is necessary to avoid complaints, or whether relaxing the limit for gas-turbine-powered aircraft would in practice result in higher noise levels from their use. Gas-turbine-powered aircraft might already be flown in breach of the limit, but without giving rise to complaints.

Table 5.3 Proposals to consider for the Model Aircraft Code

Item	Proposals to consider for the Model Aircraft Code
10	Revise phraseology to reduce risk of giving wrong impression of the aims of the Code.
11	Refer to the additional techniques for reducing noise from the aircraft (engine size, propeller pitch, and throttle opening – see BMFA website).
12	Consider a regime of marking tested models and providing a certificate to be carried by the operator.
13	Review basis of the statement that the type of model of aircraft is unimportant.
14	Consider review of exemptions in the Code from the use of mufflers and/or noise limit.
15	Permit measurements using other indices, eg 1-second L_{Aeq} , in addition to or instead of the sound pressure level (Slow), with appropriate corrections to relate the results to the level that would be obtained using max sound pressure level (Slow).
16	Investigate effect on measured level of height of source and meter model used in test procedure.
17	Investigate effect of the ground surface above which the test is conducted on the measured level.
18	Consider a modified level/test distance/procedure for gas turbines.
19	Consider ratifying the modified procedure for testing model helicopters proposed on the BMFA website.

- 5.3.6 That study found that most LAs considered that there was no problem from this noise source in their area and hence no requirement to take legal action. However, most of the LAs that expressed a view considered that the approved status of the Code enhanced its effectiveness. Out of court, the status can be referred to when communicating with modellers about whose flying of aircraft noise complaints have been received, or who have observed infringing the terms of the Code.

- 5.3.7 Only one LA reported a complaint of noise from this source in the past year. However, nearly half those responding said that they used the Code. Model Byelaws (available from the relevant Government departments) refer to the Code. It is also available on the BMFA's website. Thus, the apparent lack of use of the Code might not reflect its importance as a means for regulating noise from Model Aircraft.

5.4 Code of Practice on Noise from Audible Intruder Alarms 1982

- 5.4.1 Owing to the continuing development of the European Standard on Audible Intruder Alarms, the recent passage of the Clean Neighbourhoods and Environment Act 2005, and the impending passage of a new Parliamentary Bill (the 9th London Local Authorities Bill), recommendations on changes to the Code to maintain currency cannot be final. Against that background, it is recommended that the changes set out in **Table 5.5 (= Table 4.10)** be put into effect if the Code of Practice on Noise from Audible Intruder Alarms is revised.

Table 5.5 Recommendations for updating the Audible Alarms Code

Item	Recommendations for updating the Audible Intruder Alarms Code
1	References to CoPA should be amended to refer to the relevant sections of the EPA.
2	References to BS 4737 should be amended to refer to BSI PD 6662:2004 but this reference should be reviewed closer to any proposed revision to determine when BS EN 51031-1 will become available.
3	Reference should be made to the ACPO Policy.
4	Reference should be made to the Clean Neighbourhoods and Environment Act 2005 and the 9th London Local Authorities Bill

- 5.4.2 Note that items 2 and 4 in **Table 5.5** are dependent on the outcome of processes outside the control of Defra.
- 5.4.3 In practice, when the relevant provisions of the Clean Neighbourhoods and Environment Act 2005 are commenced, the Code of Practice would have to be redrafted to reflect changes in the key-holder registration scheme (e.g. permitted period, registration direct with LA and not police, and extension of the notification requirement to cover existing premises where there is currently no key-holder registration). Any revised Code would also need to provide guidance to LAs for those parts of their district that had not been designated alarms registration notification areas.
- 5.4.4 A number of substantive changes could be made to the Code but these are policy decisions. These matters are:
- If they have not already been addressed by then, policy decisions might also be required whether private houses should be required to have a maintenance contract for an alarm, how should DIY installations be treated
 - Extension of the scope to cover audible alarms other than intruder alarms, and
 - Alarms that are not audible outside the premises in which they are fitted but cause disturbance to adjoining premises

- 5.4.5 Although not a matter directly addressed by the Code, the circumstances in which warrants are required (when abating a nuisance from a misfiring alarm) and procedures for obtaining them (in particular out-of-hours) were topics of concern to many LA respondents, although court officials considered that existing arrangements worked reasonably well. Legal guidance from Defra on the requirements for warrants would ensure consistency in approach. Defra could also consider facilitating a forum (e.g. at a conference dealing with a range of noise issues) for LA officers and court officials from different areas to share practical warrant issuing procedures.
- 5.4.6 The study found that all LAs considered that this noise source was a problem in their area. Although few respondents thought that the Code was effective, most of them considered that its approved status enhanced its effectiveness. Two-thirds of members of the Justices' Clerks' Society who responded also thought the adopted status was a factor in the warrant issuing process.
- 5.4.7 All LAs that responded reported complaints of noise from this source in the past year. Despite their low rating of the Code's effectiveness, most respondents used the Code or a local procedure based on it. This information, taken with the numbers of complaints reported by the respondents, suggests that the use of Code is both widespread and frequent.

APPENDIX A

COPIES OF ON-LINE QUESTIONNAIRES



[Visit Rupert Taylor Homepage](#)

Defra Codes of Practice Study

Thank you for your interest in this study

The following questionnaire is designed to be completed in one session.

It consists of 17 questions broken down as follows.

The first 6 questions cover your LA and contact details, there are then 6 questions covering all three codes.

One of these (Q8) asks for complaint statistics for the 3 noise sources over the past year.

There are then additional questions relating only to audible intruder alarms (1 for non-London Boroughs, and up to 3 for London Boroughs).

[Start Questionnaire](#)

Defra Review of Noise Codes of Practice

Defra has commissioned Rupert Taylor's practice to carry out a review of three Codes of Practice adopted in 1982 under the procedure in S71 of the Control of Pollution Act 1974. The three codes are:

Code of Practice on Noise from Ice-Cream Van Chimes etc
Code of Practice on Noise from Model Aircraft
Code of Practice on Noise from Audible Intruder Alarms

The principal objectives of the review are to assess the usage and effectiveness of the codes in their current form. A further aspect of the study is to investigate whether their 'adopted' status has any bearing on their usefulness. At the end of the project, Rupert Taylor will make recommendations to the Department as to what changes, if any, should be considered for each code.

As part of the study we are seeking the views of interested groups. There follows a short questionnaire intended for officers in Local Authorities.

If you are not a Local Authority officer but would like to comment on the codes, please complete the relevant questions on the form. Alternatively you can email your comments and/or contact details to:

codesofpracticestudy@ruperttaylor.com

[Experiencing Problems Completing Questionnaire?](#)



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Defra Codes of Practice Study

QUESTIONNAIRE

1- Date: 07/02/2005
 2- Name:
 3- Position:
 4- Phone:
 5- E-mail:
 6- LA:

Privacy Policy

Personal details provided for this study will not be used for any other purpose.
 Contact will not be made in any connection other than this study.
 Details will not be held in a database after completion of the study.

7- Do you consider that any of the following noise sources are a problem in your area ?

Ice-cream van chimes: Yes No

Model aircraft: Yes No

Audible intruder alarms fixed to premises: Yes No

8- Approximately how many complaints have been received in the past year ? (or enter alternative period)

Ice-cream van chimes: Period: Total:

Model aircraft: Period: Total:

Audible intruder alarms fixed to premises

Residential: Period: Total:

Non-Residential: Period: Total:

OR

Total Residential/Non-Residential:

Period:

9- Do you make use of the following codes of practice ?

Ice-cream van chimes: Used Not used because have local scheme/procedure Not used and no local scheme

Model aircraft: Used Not used because have local scheme/procedure Not used and no local scheme

Audible intruder alarms fixed to premises: Used Not used because have local scheme/procedure Not used and no local scheme

10- Do you consider that the code is effective in preventing or controlling noise from these sources ?

Ice-cream van chimes: Yes No

Model aircraft: Yes No

Audible intruder alarms fixed to premises: Yes No

11- The codes are approved under 571 of the Control of Pollution Act 1974. Do you consider that this 'adopted' status has a bearing on their effectiveness?

Ice-cream van chimes: Enhances effectiveness Makes no difference

Model aircraft: Enhances effectiveness Makes no difference

Audible intruder alarms fixed to premises: Enhances effectiveness Makes no difference

12- What changes do you think could be considered to improve effectiveness (apart from updating references to revised standards etc)

Ice-cream van chimes:

Model aircraft:

Audible intruder alarms fixed to premises:

Question 13 for NON-London LAs only

Section 9 of The Noise and Statutory Nuisance Act 1993 includes powers relating to audible intruder alarms that have not yet been brought into force. The powers are similar to those included S23 of the London Local Authorities Act 1991 and relate to eg the standard of assessment to use for the noise, and clarification of the circumstances in which a warrant is required when deactivating an alarm.

13- If the provisions in S9 of the NSNA were brought into force, would your authority be likely to adopt them?

Yes No

Questions 14 - 17 for London Local Authorities only

14- Has your authority adopted S23 of the LLAA 1991 ?

Yes No

15- If not, what were the reasons?

16- If it has been adopted, has it proved to be more effective than the CoP?

Yes No

17- From your experience of using S23 of the LLAA 1991, what changes, if any, do you consider would improve the effectiveness of the provisions?

Please complete all required fields. Enter # into any fields you wish to leave blank.



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Thank you for your interest in this study

The following questionnaire is designed to be completed in one session.

[Start Questionnaire](#)

Defra Review of Noise Codes of Practice and Warrant Issuing Process

Last year, Defra commissioned Rupert Taylor FIOA - an independent acoustic consultancy - to carry out a review of three Codes of Practice adopted in 1982 under the procedure in S71 of the Control of Pollution Act 1974. The three codes are:

- Code of Practice on Noise from Ice Cream Van Chimes etc
- Code of Practice on Noise from Model Aircraft
- Code of Practice on Noise from Audible Intruder Alarms

One topic that emerged from the consultation concerned the issuing of warrants in relation to audible intruder alarms. These warrants are often required to enable local authority officers to enter premises to silence misfiring alarms when the keyholder cannot be located. This matter is not addressed the relevant Code of Practice and was not specifically considered in the initial consultation.

Defra has therefore extended the study to provide an opportunity to comment on the warrant issuing process, and the approved status of the codes. (The objective of the overall study is to assess the usage and effectiveness of the codes in their current form. The question of whether their adopted status has any bearing on their usefulness therefore forms part of the study.)

This questionnaire is intended for Magistrates', Magistrates' Clerks, and others concerned with the legal process. If you do not fall into one of these categories but would like to comment on the codes, please complete the relevant questions on the form. Alternatively you can email your comments and/or contact details to:

codesofpracticestudy@ruperttaylor.com

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Defra Codes of Practice Study

QUESTIONNAIRE

Please complete all the questions.
If you do not have a response, please enter NA.

1- Name:
2- Telephone:
3- Email:

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4- Have you been involved in the process of issuing warrants to authorised LA officers to enter premises by force to silence audible intruder alarms?

Yes No

5- If so, on approximately how many occasions in the past year?

6- How many of those occurred out of normal working hours?

7- Currently, outside London, the basis for the warrant application is to abate a statutory nuisance under the provisions of the Environmental Protection Act. In most cases, the terms of the Code of Practice will have been breached. Do you consider that the Codes' approved status is important when deciding whether to issue a warrant?

Yes No

8- In some cases, the alarm might have been sounding for more than 24-hours before an application for a warrant is made out of normal hours. To what extent is that a factor in deciding whether a warrant is required?

9- The Clean Neighbourhoods' Bill includes provisions that would permit a warrant to be issued if the alarm has been sounding continuously for more than 20 minutes and intermittently for more than 1 hour, and this is likely to give persons living or working in the vicinity reasonable cause for annoyance. Do you think that this will make it more straightforward to decide whether a warrant should be issued?

Yes No

10- Name of Local Authority in whose district your court is located.

11- Are there any matters that you consider could make the process of issuing warrants out of hours more straightforward in these cases?

If you wish to have the information you have entered emailed to you when you submit this form please tick this box.

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