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Noise and Nuisance Research Newsletter

2009 - 2010

Issue One, April 2009



Llywodraeth Cynulliad Cymru
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Government**



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1 Introduction

1.1 Purpose of this document

The purpose of this document is to:

(i) inform potential contractors of the Water Directorate Group's (WD) research requirements for noise and nuisance, which the Department may wish to procure during 2009-10, and;

(ii) stimulate potential contractors to express their interest in conducting projects using an "Expression of Interest" form SID2 (EDG) as outlined on the Defra web-site at <http://www.defra.gov.uk/science/funding/forms.htm>.

This document outlines most of the expected requirements at the time of publication. **It should not be assumed that all of the projects listed below will be funded.**

1.2 Research Competitions

1.2.1 Multiple Tendering

Defra considers multiple tendering to be an important means of procuring research with the goals of ensuring scientific quality, fitness for purpose and value for money. As part of this process, Defra is committed to multiple tendering and much of the Environmental Protection research programme is procured in this way. Invitations to tender are issued to a selected number of contractors who (by submitting an Expression of Interest form SID2(EDG)) have expressed their interest in conducting the work; Defra reserves the right however to solicit Expressions of Interest and/or extend invitations to tender to additional researchers where, for example, initial interest appears inadequate to run a meaningful competition.

The invitation to submit Expressions of Interest is open to all research providers. Those receiving an invitation to tender will be expected to have read "The Joint Code of Practice for Research" - currently on-line at http://www.defra.gov.uk/science/documents/publications/2003/QACoP_V8.pdf - and that they will use their best efforts to work towards full compliance with it.

1.3 Guidance to Contractors

1.3.1 Initial Expression of Interest

If your organisation wishes to be considered for any or all of the projects to be procured by Multiple Tender as listed in chapter 2 of this document, please complete the SID2(EDG) Expression of Interest (Eol) form for each individual project, providing contact details and a short statement of your relevant experience of the topic. The SID2 (EDG) Eol form can be downloaded from the Defra web-site (see <http://www.defra.gov.uk/science/funding/forms.htm>) in Adobe Acrobat PDF format enhanced to allow text editing and import of files and/or charts and images. An Eol should not be taken as a guarantee of inclusion in the list. Whilst all Eol's will be acknowledged, because of the

anticipated volume of responses, contractors who are not invited to tender for a specific project may not be informed.

Expressions of interest in a project should be sent to Harjinder Grewal – full contact details are provided at the end of this Newsletter.

The information that contractors provide in their Eol is used to select a shortlist of (usually 3-6) invitees to tender. It is therefore important that potential contractors complete the Eol form explaining their relevant experience and capabilities in relation to specific projects. At this stage, the only details available about specific projects are those given in this document, if you have any general queries relating to its research programme, or require a hardcopy version of this Newsletter, you should contact Harjinder Grewal, Ian Sherlock, Stephen Parkinson or Richard Perkins – full contact details are provided at the end of this Newsletter.

Eol's are welcome at any stage up to the issue of tenders. **An initial deadline of 29th May 2009** is set for the first projects, but Eol's will be accepted up to a week before the issue of tenders for any project let later in the year. There is no pre-determined order in which projects will commence, however, so contractors are encouraged to submit Eol's by the initial deadline.

1.3.2 Open Competition

From time to time the decision may be taken to procure certain projects via open competition - that is by inviting organisations to tender for a project without having to submit an Eol in advance. Details of projects which are to be procured in this manner will be published on the Defra website at <http://www.defra.gov.uk/science/funding/competitions.htm>.

Any organisation which has submitted an Eol for a project included in this Newsletter which is then procured via open competition will be informed of the decision by email and invited to submit a tender.

1.3.3 Invitations to Tender

This section is intended to provide general guidance on the way contractors are selected for research contracts.

The Department usually invites three to six organisations to tender for each project. Formal invitations to tender include:

- An invitation to tender letter, which includes a timetable;
- The specification for the project giving details of the objectives and why it is being commissioned;
- Instructions to contractors on the procedure for tendering;
- Guidance on the type of information to include in the tender;
- The Defra standard contract conditions.

In some cases a pre-tender consultation exercise is carried out in order to ascertain contractor interest in the project and to consult on the specification for the work. Specifications are generally output-based, giving clear guidance

on the Department's requirements but leaving contractors to suggest the most appropriate methods to achieve the objectives.

1.3.4 Assessment of Tenders

Tenders will be assessed in terms of value for money, taking account of the evaluation criteria as set out in the project specification, the quality and costs of the contractor's proposals and other issues relevant to the particular project. This may include:

- The contractor's understanding of the issues being addressed;
- Familiarity with previous relevant research;
- The experience of the research team;
- Arrangements for managing the research;
- The proposed costs and distribution of resources.

Interviews may be held to assist with assessment. Occasionally, some contractors are invited to make a presentation on their proposals to assist in the assessment process. All bidding contractors are informed of the outcome of the assessment in writing.

1.3.5 Awarding of Contracts

The assessment of tender proposals usually results in the selection of a preferred tender, although the Department is not bound to accept any tender. Post-tender discussions may take place with the preferred contractor before the contract is awarded.

1.3.6 Contract Management

The Department will nominate an officer to act as the initial contact point for the contractor and to manage and review the programme of work through to completion.

1.4 Publication

While final decisions on publication remain with the Department, there is a presumption that research commissioned will be published.

1.5 Background

The Department for Environment, Food and Rural Affairs (Defra) is a Government Department in the UK. The overarching challenge for Defra is to secure a healthy environment in which we and future generations can prosper.

As we build a low carbon, resource efficient economy, Defra helps people to adapt to changes, deals with environmental risks and makes the most of the opportunity we now have to secure a sustainable society and a healthy environment. This will help see us through the difficult economic times, volatile food and energy prices and a changing climate which all make us more aware that we can't take our environment for granted.

We develop and promote initiatives to address noise and other statutory nuisance and manage research into noise. The Noise and Nuisance policy team is responsible for:

- Developing policy on neighbourhood noise (other than in the workplace) and other statutory nuisance (e.g. dust, insects, smells/odours and bonfire nuisance).
- Developing policy on ambient noise (including a proposed National Ambient Noise Strategy - NANS);
- Negotiating proposals for European legislation on environmental noise and implementing the legislation once it comes into force;
- Managing noise research, including: noise mapping, assessing current levels and attitudes to environmental noise, a series of joint projects with the Department of Health on Noise and Health, projects connected with implementation of the EC Directive on Environmental Noise and the proposed Ambient Noise Strategy, and projects in response to noise and other nuisance issues;
- Disseminating information on how to avoid causing annoyance to others and what to do if you have problem.

1.6 Other environment-related Research

The Department also funds other programmes of environment-related research, which are not included in this Newsletter. Defra is also lead sponsor for a number of relevant LINK programmes: sustainable arable, sustainable livestock, horticulture and aquaculture (now the Committee for Aquaculture R&D).

These programmes are commissioned in a variety of ways, including through Research Requirements Documents, competitions and Research Newsletters. For more information please visit the Defra website <http://www.defra.gov.uk/science/funding/competitions.htm>. Contractors can also arrange to be notified automatically when new intentions to procure for these programmes are announced by registering with the "Competition Email Notification Service" at research.competitions@defra.gsi.gov.uk.

1.7 Publication of this Newsletter

New projects listed in this newsletter are planned for commissioning during the financial year 2009/10 but the exact content and timing will depend on the requirements of the Department. It is likely that updates of this newsletter will be posted on the Defra website at regular intervals as policy demands necessitate and/or the findings of other research/legislation may lead towards changes in research priorities. We would encourage interested parties to check the website regularly for updates throughout the year.

2 Noise and Nuisance

2.1 Aims of the programme

The Noise and Nuisance research programme aims to provide good quality, evidence-based advice to support policy development on neighbourhood/neighbourhood noise and environmental noise and vibration issues in the UK and Europe. The programme also supports policy on other nuisance issues such as artificial lighting, insects and odour nuisance.

All Defra research must be commissioned under a ROAME statement which provides a clear statement of the rationale and objectives of the research programme. ROAME statements must be reviewed on a regular basis. The current ROAME statement (link below) for the UK Noise Research Programme covers the period 2008-2013.

<http://www.defra.gov.uk/environment/noise/research/pdf/noise-research-ROAME-2008-2013.pdf>

Sound is a feature of everyday life, but noise, unwanted sound, can be a significant problem for some people. Noise can have an adverse effect on the environment and on the quality of life enjoyed by individuals and communities. It can irritate and annoy, interrupt sleep and disturb concentration. Prolonged exposure to very loud noise can do irreparable damage to hearing. Whilst some noise is an inevitable consequence of human activity, more needs to be done to minimise the nuisance it causes, and the potential adverse effects on the health of those exposed to excessive levels of noise.

The factors influencing human reactions to noise and the options for dealing with the problems however, are many and complex. Therefore, research is required to aid the formulation of policy and the development of statutory and voluntary controls, where necessary, or other mitigation measures. This takes place within the wider context of Defra's objectives for protecting the environment and enhancing the quality of life and public health.

The research programme falls into two main categories:

Environmental (Ambient) Noise research (including noise mapping)

Neighbour and Neighbourhood Noise and Statutory Nuisance

Organisations are invited to submit Expressions of Interest (Eoi) for as many projects as they wish (see guidance notes in Sections 1.2 & 1.3); equally, organisations are encouraged to submit an Eoi only for those which they feel able to provide the necessary experience, knowledge and skills to undertake. It is stressed that the list does not represent a particular order of priority and that the Department may choose not to issue an invitation for any particular, individual project.

The list contains a number of projects that the Department intends to commission in the coming months, some of which have been carried over from previous research lists. It is the Department's intention to update the list

regularly, as priorities and demands dictate. An omission of a project not carried forward from the previous research list does not mean that the project may not re-appear in subsequent updates.

2.2 Publications

An up-to-date list of publications can be found on the Department's website at <http://www.defra.gov.uk/environment/noise/research/index.htm>. This website also provides useful information about the Department's policies on noise and nuisance.

2.3 New Projects to be let

The exact content and timing of the projects listed below will depend on the requirements of the Department. The newsletter may be amended as policy demands necessitate and/or the findings of other research/legislation lead towards changes in research priorities. While final decisions on publication remain with the Department, there is a presumption that research commissioned will be published, at the appropriate time.

In some of the sections below there are projects carried over from previous years. If you have already submitted an EoI for any of these projects, there is no need to do so again. If you have not previously expressed an interest, please feel free to do so. **Note: the scope of some of these projects may have changed since last year, so please check the latest project description, to see if you are still interested in bidding for this work.**

The Department also funds other programmes of environment-related research. For more information please visit the Defra website www.defra.gov.uk/science/default.htm.

2.3.1 Environmental (Ambient) Noise Research 2009/10

Ref 0910-01 - Attitudes to Environmental Noise from Concerts

It has become apparent that the former Noise Council's Code of Practice for Environmental Noise Control at Concerts is in need of refreshment. This project will involve a social survey of those who live nearby various event venues to understand their attitudes to the concert noise during and possibly immediately after events this summer. The successful contractor will be provided with a schedule of different types of concert events at which the surveys must be undertaken. Defra will be working closely with the Chartered Institute of Environmental Health on this project.

Ref 0910-02 - Understanding the importance of relatively quiet areas

Defra is considering a research project that will explore the extent to which relatively quiet areas are an important factor in enhancing the quality of life of a neighbourhood. Such areas may not be regarded as quiet in absolute terms, but which may nevertheless provide an important local resource. The research may involve the capture and analysis of a combination of social survey data and noise measurements.

Ref 0910-03 - Research into the practical and policy applications of soundscape concepts and techniques in urban areas (Phase 2)

This represents phase 2 of the soundscape research that is currently underway (NANR 200), and will look to develop practical guidance to assist in the identification, management and enhancement of soundscapes in urban areas, for use by land use planners, development planners, Environmental Health Officers, and architects.

Ref 0910-04 - Evaluation of the implications of moving towards a greater use of L_{den} and L_{Aeq} indicators in the assessment of road traffic noise

The current standard indicator for assessing road traffic noise is the $L_{A10,18h}$. All other transport sources are assessed to a greater or lesser extent by the use of the L_{Aeq} indicator. Furthermore, Directive 2002/49/EC required results of strategic noise mapping to be presented in terms of the L_{den} indicator. Consequently, Defra has identified a need to consider and evaluate the implications of possibly moving towards a greater use of L_{den} and L_{Aeq} indicators as a means of understanding the effects of noise from road traffic. Research is needed to understand response (focusing on annoyance at this stage) to road traffic noise, and how well L_{Aeq} and L_{den} indicators reflect this response. Initially, the project will be a feasibility study to identify the issues that would need to be addressed and proposing a methodology for doing so. Depending on the outcome of this project, a further more substantial study, carried out in conjunction with the Department for Transport, may be undertaken.

Ref 0910-05 - Securing robust data regarding traffic flow and associated information for the night period (23.00 – 07.00)

During the noise mapping undertaken to fulfil our obligations under Directive 2002/49/EC, it became clear that there was a lack of robust traffic flow and related data available for the 8 hour night period of 23.00 to 07.00 hours. Defra wishes to let a project to understand the options for establishing a mechanism that secures such robust data. This project will involve understanding what data are currently collected, how they are collected, how they are checked and verified and what more would need to be done to make such data fit for purpose for use in strategic noise mapping both in terms of detail and extent.

2.3.2 Joint Environmental Noise and Neighbourhood Noise Research 2009/10

Ref 0910-06 [NANR 198] - National Noise Attitude Survey – It is possible that this project will be split into a phase 1 (scoping study) and phase 2 (the attitude survey)

The Department previously conducted full National Noise Attitude Surveys in 1990 and 2000 to understand attitudes to noise in general and to monitor trends. Defra is minded to repeat this study in 2010 but initially wishes to let a scoping study to understand fully what issues need to be considered before doing so. This would include questionnaire design, sampling strategy and possibly a small pilot study to test the functionality of the proposed approach.

Ref 0910-07 [NANR 280] - National Noise Incidence Study 2010 – It is possible that this project will be split into a phase 1 (scoping study) and phase 2 (the study itself)

The Department previously conducted a National Noise Incidence Study in 1990 and 2000 to gain an indication of noise exposure from all sources and to monitor trends in noise levels. Defra is minded to repeat this study in 2010 but initially wishes to let a scoping study to understand fully what issues need to be considered before doing so. This would include monitoring

methodology, sampling strategy and how geo-referencing technologies might be exploited in this work. The scoping may also include a small pilot study to test the functionality of the proposed approach.

2.3.3 Neighbour/Neighbourhood Noise and Statutory Nuisance Research 2009/10

Ref 0910-08 [NANR 244] - Building-mounted micro wind turbines

The Communities and Local Government Department are currently considering the inclusion within the General Permitted Development Order for domestic micro renewable technologies. There may be potential noise and vibration issues, particularly for building-mounted micro wind turbines, although insufficient evidence exists on vibration and noise from structure-borne noise from which to draw any firm conclusions at this stage. Defra, CLG and BERR wish to let a contract to investigate noise and vibration issues related to the installation of a micro wind turbine to a building, such as a semi-detached, terraced house or flat, and to advise whether the issues can be successfully mitigated with current technologies, and to draw up guidelines for manufacturers and installers to enable a suitable installation.

Ref 0910-09 [NANR 240] - Review of CIEH statistics returns and Local Authority opinion/ response rate (research to be done in conjunction/agreement with CIEH)

Following the introduction of the new reporting system for complaint statistics, a review is required with the aim of optimising the response rate of noise statistics, ensuring they are robust and relevant, by identifying issues with the current system and proposing suitable modification/improvements that can or could be made to increase the value of the process. It is envisaged that close working with the CIEH and local authorities will be an intrinsic part of this project.

Ref 0910-10 [NANR 241] - Light nuisance

The Department is likely to identify projects on statutory nuisance from artificial light depending on the findings of the Royal Commission on Environmental Pollution Short Report on Environmental Impacts of Artificial Light.

Ref 0910-11 - Research in to market segmentation of noise causers and noise sufferers

Further research to build upon the work carried out by ENCAMS that looked at market segmentation of noise causers and noise sufferers in neighbourhood noise complaints.

Ref 0910-12 - Investigation into the use of the Local Government Act 2000 and Local Area Agreements to improve the noise environment

The Local Government Act 2000 requires that LAs prepare a strategy for promoting or improving the economic, social and environmental well-being of their area and contributing to the achievement of sustainable development in the UK (often referred to as a "community strategy"). The explanatory notes for this act do not provide any definitions or suggested interpretations of

“economic, social and environmental well – being” and it is therefore assumed that noise could be considered to be included in this context.

The aim of the community strategy is to create a long term vision and set an agenda for priorities. A Local Area Agreement (LAA) is then developed, which is a 3 year contract between the local strategic partnership which comprises the LA and its partners, and central government to deliver particular priorities as set out in the community strategy.

Research is needed to ascertain the extent to which LAs have used the duties and powers under the Local Government Act 2000 to improve the noise environment in addition to research into further practical ways in which the community strategy could be used to improve the noise environment. Examples of successful case studies demonstrating partnership working and the integration of noise with other health based strategies and policies would be of particular interest.

Ref 0910-13 - Follow-up to research into the noise impact of the liberalisation of the Licensing laws

Now that the Licensing Act 2003 has been in force for 5 years, there would be a benefit in undertaking research to ascertain whether the liberalisation of the licensing laws has had an impact on the noise environment and if so, the extent of this impact and the implications of it. Examples of successful case studies where local authorities have worked with the local community and the industry to reduce the impact would be of particular interest, as would research into the impact of the introduction of the Health Act 2006 and the associated "smoking ban" on the noise environment. Examples of successful local controls e.g. local policies and licensing or planning conditions would also be of interest and benefit to local authorities and the industry.

Ref 0910-14 - Research into statistics on statutory nuisances other than noise

The Department may wish to conduct research into statistics on statutory nuisances other than noise. An investigation in to the collection of statistics on odour, smoke, pollution and any other complaint of statutory nuisance (other than noise) that may be received or reported to a Local Authority.

How prevalent are the complaint numbers for the variety of complaint types. A review of the ways in which Statutory Nuisance complaints are currently recorded an evaluation of the quality of data that currently exists and how this could be improved.

2.4 Contact Points

General enquiries about the broad scope of the Noise Research programme, aspects of commissioning and contract conditions should be addressed to:

Harjinder Grewal

Contracts Manager
Local Environment Protection
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17 Smith Square, London
SW1P 3JR

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Enquiries about individual projects should be addressed to the persons below:

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