**Joint Research Centre** 

### Workshop

#### on

# Noise mapping according to the 2002/49/EC

## TARGET QUALITY

AND

## **INPUT VALUES REQUIREMENTS**

#### 17-18 March 2009, Ispra (Italy)

Co-organised by: The European Commission (DG JRC, DG ENV) and the European Environmental Agency (EEA)

#### **OBJECTIVES & TOPICS:**

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The European Environmental Noise Directive (2002/49/EC) requires to the Member States to produce noise maps and noise reduction action plans and also aims at rising awareness about environmental noise exposure at both European and national levels. According to the Directive, these noise maps and action plans should have been obtained by employing either the interim noise assessment methods or equivalent national methods and using recent input data on the specific noise sources, surrounding environments and population distribution in buildings.

The European Commission provided the Member States with recommendations and guidelines on the use of the assessment techniques and for clarifying unclear provisions of the Directive (i.e., Commission Guidelines adopted on 6 August 2003 and WG-AEN "Good Practice Guide for Strategic Noise Mapping and the Production of Associated Data on Noise Exposure"). Also, the European Environment Agency provided support to the collection and delivering of the noise maps through the Environmental Noise Directive Reporting Mechanism (ENDRM) including the Reportnet IT tool.

Regardless of the aforementioned supporting documents, the production of noise maps by the EU MS followed different approaches between and within the different Member States that consequently influenced the quality of the noise maps.

In the context of the last Noise Regulatory Committee meeting in May 2008 and during other recent technical and scientific forums, representatives and experts of the EU









Member States expressed their concerns about the quality, availability and comparability of input values and techniques used in the noise mapping.

Inconsistencies in noise maps across member states will arise despite them using the same interim method (an/or equivalent to interim methods) and even if a common harmonised method will be in place in the future – due to the quality of the input data.

Further to this, in the context of the review of the END the European Commission may propose to the European Parliament and the Council common assessment methods, aimed at obtaining comparable results across the EU Member States regarding the four major environmental noise sources.

In this perspective, before proceeding to the selection of potential common assessment methods, a key factor to be tackled is the *quality of the results* that would meet the general objectives of the Directive. The quality of the results can be reasonably achieved provided that the following issues will be considered and properly managed: *availability of the required input values* to public environmental offices and private consultants, *quality of these data*, *guidance on the use of calculation methods and their implementation* into calculation software and *format of the data* to be exchanged.

The EC is expected to consider these issues in its proposal for common European methods. Feedbacks received from National authorities and consultants directly involved in the preparation of the noise maps during the first round of noise mapping is considered an essential prerequisite to understand where to put emphasis in the preparation of common methods. Certainly, the common assessment methods will include guidelines on the collection of input values and on their associated quality and this workshop constitutes a first step towards achieving this.

This workshop is addressing the EU MS noise representatives, public authorities, private noise consultants and software developers who are invited to contribute to the development of requirements on the input values and their associated quality in view of the next round of European noise mapping.

The debate will be opened to all participants who can freely contribute with suggestions and comments.

The Workshop's final program is attached hereafter.

The organising committee:

Balazs Gergely (European Commission - DG Environment)

Stylianos Kephalopoulos (European Commission - DG JRC)

Marco Paviotti (European Commission - DG JRC)

Colin Nugent (European Environmental Agency)





European Environment Agency 🔿



| WORKSHOP PROGRAM |
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|                  |

| DAY 1 - 17 March 2009        |  |                             |  |  |
|------------------------------|--|-----------------------------|--|--|
| 8:30-                        | Welcome of participants                                |                             |  |  |
| 9:30                         |  |                             |  |  |
| 9 <mark>:1</mark> 5-<br>9:30 | Opening by JRC/IHCP Director                           | Elke Anklam                 |  |  |
| 9:30-                        | Presentation on:                                       | Balazs Gergely              |  |  |
| 9:40                         | Noise policy at EU level                               | ANT ATTS                    |  |  |
| 9:40-<br>9:45                | Presentation on:<br>DG JRC: Environmental noise &      | Stylianos Kephalopoulos     |  |  |
| 0.40                         | associated health effects                              |                             |  |  |
| 1.<br>1. 1. 1.               | activities   |                             |  |  |
| 9:45-                        | Presentation on:                                       | Colin Nugent                |  |  |
| 9:50                         | Introduction to EEA activities                         |                             |  |  |
| 9:50-                        | Presentation on:                                       | Colin Nugent                |  |  |
| 10:10                        | Requirements on the quality of                         |                             |  |  |
|                              | the final results                                      |                             |  |  |
| 10:10-<br>10:30              | Presentation on:<br>Relevant (but difficult to obtain) | John Hinton                 |  |  |
| 10.30                        | input-values for noise mapping                         |                             |  |  |
| 10:30-                       | Presentation on:                                       | Simon Shilton               |  |  |
| 10:50                        | Critical input parameters for road                     | Simon Simon                 |  |  |
|                              | and railway noise modelling                            |                             |  |  |
| 10:50-                       | Coffee break   | P. P CA. WALK-PROPERTY INC. |  |  |
| 11:00                        |  |                             |  |  |
| 11:00-<br>11:20              | Presentation on:<br>Critical input parameters for      | Nico van Oosten             |  |  |
| 11.20                        | aircraft noise modelling                               |                             |  |  |
| 11:20-                       | Presentation on:                                       | Darja Lihteneger            |  |  |
| 11:30                        | INSPIRE Data Specifications                            | Dulju Lintonogol            |  |  |
|                              | Development - potential                                |                             |  |  |
|                              | relationships and relevance to the                     |                             |  |  |
| 11.00                        | "Noise Community"                                      |                             |  |  |
| 11:30-<br>11:50              | Presentation on:<br>Necessary quality of the input     | Marco Paviotti              |  |  |
| 11.50                        | data in the noise mapping                              | Internet internet internet  |  |  |
| NA                           | methods as a function of                               | L'                          |  |  |
| 1                            | expected output results                                |                             |  |  |
| 11:50-                       | Presentation on:                                       | Nigel Jones                 |  |  |
| 12:10                        | Requirements on the quality of                         |                             |  |  |
| 10.40                        | the final results                                      |                             |  |  |
| 12:10-<br>13:10              | Lunch  |                             |  |  |
| 13:15-<br>16:15              | Plenary session:                                       | All participants            |  |  |
|                              | Questions for the plenary session                      |                             |  |  |
|                              | of 17 March 2009                                       |                             |  |  |
|                              | Moderator: Stylianos Kephalopoulos                     |                             |  |  |







| 16:15-                                     | Coffee break                       |                                     |
|--|------------------------------------|-------------------------------------|
| 16:30                                      |                                    |                                     |
| 1 <mark>6</mark> :30-                      | Parallel working groups:           | All participants                    |
| 1 <mark>8</mark> :00                       |                                    | subdivided into two WGs             |
| 10.55<br>10.60<br>10.65                    | WG 1 on "road & railway: quality   |                                     |
| - 79                                       | of input values"                   |                                     |
|  |                                    |                                     |
|  | Moderator: Simon Shilton           | AND APT                             |
| _  | Rapporteur: Xavier Valero Gonzalez | AK WAK                              |
|  | WG 2 on "industrial & aircraft:    |                                     |
|  | quality of input values"           |                                     |
| - 14 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( | duality of hiput values            |                                     |
| -  | Moderator: Nico van Oosten         |                                     |
|  | Rapporteur: Marco Paviotti         |                                     |
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| DAY 2 – 18 March 2009 |  |  |  |  |  |
| 9:00-<br>10:45        | Parallel working groups (cont.):   | All participants subdivided into two WGs |  |  |  |
| 10.10                 | WG 1 on "road & railway input values"  |  |  |  |  |
|                       | WG 2 on "industrial & aircraft input values"   |  |  |  |  |
| 10:45-<br>11:00       | Coffee break   |  |  |  |  |
| 11:00-<br>13:00       | Parallel working groups (cont.):   | All participants subdivided into two WGs |  |  |  |
|                       | WG 1 on "road & railway input values"  |  |  |  |  |
|                       | WG 2 on "industrial & aircraft input values"   |  |  |  |  |
| 13:00-<br>14:00       | Lunch  |  |  |  |  |
| 14:00-<br>14:30       | Plenary session:<br><u>Report from WG1</u><br><u>on "road &amp; rail input values"</u><br>Report: <u>Simon Shilton</u> | All participants                         |  |  |  |
| 14:30-<br>15:00       | Plenary session:<br>Summary of breakout session<br>Industrial & Aircraft noise<br>Report: Nico van Oosten              | All participants                         |  |  |  |
| 15:00-<br>16:00       | Conclusions and<br>Recommendations   | Marco Paviotti                           |  |  |  |





