

## SCHEDULE 1

regulations 4 and 9

### MINIMUM REQUIREMENTS FOR STRATEGIC NOISE MAPPING

#### Interpretation

1. In this Schedule—

“editable” means in a format that allows (without the need for manipulation) the electronic production of—

- (a) numerical data in tables, and
- (b) graphical plots,

to display the information described in paragraphs 1.5, 1.6, 1.7, 2.5, 2.6 and 2.7 of Annex VI of the Directive;

“grid” means a grid of vector points which are—

- (c) at 10 metre by 10 metre intervals,
- (d) spatially referenced to the British National Grid reference system used by the Ordnance Survey as a pair of integers to show Eastings then Northings in metres from the origin, and
- (e) aligned with the 10 metre vertices of the British National Grid reference system used by the Ordnance Survey so that references finish with the number zero.

#### General requirements for strategic noise maps

2.—(1) Strategic noise maps and their revisions must—

- (a) satisfy the minimum requirements laid down in Annex IV of the Directive; and
- (b) be clear and comprehensible.

(2) In applying paragraph (1)(a) any reference in Annex IV of the Directive to—

- (a) Article 8 of the Directive shall be taken to be a reference to regulations 15, 17 and 19 of these Regulations;
- (b) Article 9 of the Directive shall be taken to be a reference to regulation 29 of these Regulations.

#### Requirements for strategic noise maps for agglomerations

3.—(1) This paragraph applies only to—

- (a) a strategic noise map made under regulation 7(1)(a), 7(2)(a), 12(1) or 12(3); or
- (b) a revision of such a strategic noise map.

(2) Strategic noise maps must—

- (a) include the information (in electronic format) described in paragraphs 1.1 to 1.4 inclusive of Annex VI of the Directive; and
- (b) include editable numerical data in electronic form containing the values of  $L_{den}$ ,  $L_{night}$  and the supplementary noise indicators on a grid.

#### Requirements for strategic noise maps for major roads, major railways and major airports

4.—(1) This paragraph applies only to—

- (a) any strategic noise map made under—

- (i) regulation 7(1)(b) to (d),
  - (ii) regulation 7(2)(b) to (d),
  - (iii) regulation 11(2); or
  - (b) any revision of such a map.
- (2) Strategic noise maps must—
- (a) include the information (in electronic format) described in paragraphs 2.1 to 2.4 inclusive of Annex VI of the Directive; and
  - (b) include editable numerical data in electronic form containing the values of  $L_{den}$ ,  $L_{night}$  and the supplementary noise indicators on a grid.

## SCHEDULE 2

regulation 4

## ASSESSMENT METHODS FOR THE NOISE INDICATORS

**Introduction**

1.—(1) The values of  $L_{den}$ ,  $L_{night}$  and the supplementary noise indicators must be determined by computation (at the assessment position).

(2) In this Schedule—

“assessment position” means the assessment height in paragraph 7 of Annex IV of the Directive;

“Recommendation” means Commission Recommendation 2003/613/EC of 6 August 2003 concerning the guidelines on the revised interim computation methods for industrial noise, aircraft noise, road traffic noise and railway noise, and related emissions data<sup>(1)</sup>.

**Assessment method for road traffic noise indicators**

2. For road traffic noise indicators the assessment method “Calculation of road traffic noise” (Department of Transport, 7th June 1988, HMSO)<sup>(2)</sup> must be used, adapted using the report “Method for converting the UK road traffic noise index  $LA_{10,18h}$  to the EU noise indices for road noise mapping” (DEFRA, 24th January 2006)<sup>(3)</sup>.

**Assessment method for railway noise indicators**

3. For railway noise indicators the assessment methods—

(a) “Calculation of railway noise” (Department of Transport, 13th July 1995, HMSO)<sup>(4)</sup>; and

(b) (in relation to railways to which it is expressed to apply) “Calculation of railway noise 1995 Supplement No. 1 Procedure for the calculation of noise from Eurostar trains class 373” (Department for Transport, 20th October 1996, Stationery Office)<sup>(5)</sup>,

must be used, adapted as shown in Figure 6.5 of the report “Rail and wheel roughness – implications for noise mapping based on the Calculation of Railway Noise procedure” (DEFRA, March 2004)<sup>(6)</sup>.

(1) O.J. No. L 212, 22.8.2003, p. 49.

(2) ISBN 0115508473.

(3) Prepared by TRL Limited and Casella Stanger, Document Reference st/05/91/AGG04442.

(4) ISBN 0115517545.

(5) ISBN 0115518738.

(6) Prepared by AEA Technology plc, Document Reference: AEATR-PC&E-2003-002.

### Assessment methods for aircraft noise indicators

4. For aircraft noise indicators the assessment method “Report on Standard Method of Computing Noise Contours around Civil Airports” (Second Edition, European Civil Aviation Conference, 2–3 July 1997)(7) must be used in accordance with paragraph 2.4 of the Annex in the Recommendation.

### Assessment methods for industrial noise indicators and port noise indicators

5.—(1) For industrial noise indicators and port noise indicators the propagation assessment method described in “ISO 9613-2:1996 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation” (International Standards Organisation, 1996)(8) must be used in accordance with paragraph 2.5 of the Annex in the Recommendation.

(2) Suitable noise emission data (input data) for “ISO 9613-2:1996 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation” can be obtained either from measurements carried out in accordance with one of the following methods:

- (a) “Acoustics. Determination of sound power levels of multisource industrial plants for evaluation of sound pressure levels in the environment. Engineering method” (BS ISO 8297:1994, British Standards Institute)(9);
- (b) “Acoustics. Determination of sound power levels of noise sources using sound pressure. Engineering method in an essentially free field over a reflecting plane” (BS EN ISO 3744:1995, British Standards Institute)(10);
- (c) “Acoustics. Determination of sound power levels of noise sources using sound pressure. Survey method using an enveloping measurement surface over a reflecting plane” (BS EN ISO 3746:1996, British Standards Institute)(11),

or by using Toolkit 10 of the “Good Practice Guide for Strategic Noise Mapping and the Production of Associated Data on Noise Exposure Version 2, Position Paper Final Draft” (European Commission Working Group Assessment of Exposure to Noise, 13 January 2006)(12).

## SCHEDULE 3

regulation 4

### SUPPLEMENTARY NOISE INDICATORS

#### Interpretation

##### 1. In this Schedule—

“ $L_{A10,18h}$ ” is the arithmetic mean noise level in dB(A) exceeded for 10% of each hour over the period 06:00 - 24:00 hours;

“ $L_{Aeq,16h}$ ” is the equivalent continuous sound level in dB(A) that, over the period 07:00 – 23:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period;

(7) Adopted by the Twenty-First Plenary Session of ECAC, Document Reference: ECAC.CEAC Doc. 29.

(8) International Organisation for Standardization (<http://www.iso.ch>)

(9) British Standards Institute ([http://www.standardsdirect.org/standards/standards3/StandardsCatalogue24\\_view\\_23347.html](http://www.standardsdirect.org/standards/standards3/StandardsCatalogue24_view_23347.html))

(10) British Standards Institute ([http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24\\_view\\_19606.html](http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24_view_19606.html))

(11) British Standards Institute ([http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24\\_view\\_19608.html](http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24_view_19608.html))

(12) European Commission Working Group Assessment of Exposure to Noise (<http://www.defra.gov.uk/environment/noise/mapping/exposure/pdf/exposuredata-guide.pdf>)

*Status: This is the original version (as it was originally made).*

“ $L_{Aeq,18h}$ ” is the equivalent continuous sound level in dB(A) that, over the period 06:00 – 24:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period;

“ $L_{Aeq,6h}$ ” is the equivalent continuous sound level in dB(A) that, over the period 24:00 – 06:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period.

### **Road Traffic Noise**

2. The supplementary noise indicators in relation to road traffic noise are—
  - (a)  $L_{A10,18h}$ ;
  - (b)  $L_{Aeq,16h}$ ;
  - (c)  $L_{day}$ ; and
  - (d)  $L_{evening}$ .

### **Railway Noise**

3. The supplementary noise indicators in relation to railway noise are—
  - (a)  $L_{Aeq,16h}$ ;
  - (b)  $L_{Aeq,18h}$ ;
  - (c)  $L_{Aeq,6h}$ ;
  - (d)  $L_{day}$ ; and
  - (e)  $L_{evening}$ .

### **Aircraft Noise**

4. The supplementary noise indicators in relation to aircraft noise are—
  - (a)  $L_{Aeq,16h}$ ;
  - (b)  $L_{day}$ ; and
  - (c)  $L_{evening}$ .

### **Industrial Noise and Port Noise**

5. The supplementary noise indicators in relation to industrial noise and port noise are—
  - (a)  $L_{Aeq,16h}$ ;
  - (b)  $L_{day}$ ; and
  - (c)  $L_{evening}$ .

## SCHEDULE 4

regulation 15

### MINIMUM REQUIREMENTS FOR ACTION PLANS

#### **General**

- 1.—(1) An action plan must—

- (a) meet the minimum requirements of Annex V of the Directive; and
  - (b) contain a summary covering all the important aspects referred to in Annex V of the Directive, not exceeding ten pages in length.
- (2) In applying paragraph (1) any reference in Annex V of the Directive to—
- (a) Article 5 of the Directive shall be taken to be a reference to regulation 4 of these Regulations;
  - (b) Article 8(7) of the Directive shall be taken to be a reference to regulation 20 of these Regulations.