#### SCHEDULE 5

# DATA QUALITY OBJECTIVES AND COMPILATION OF RESULTS OF AIR QUALITY ASSESSMENT

# PART I

### DATA QUALITY OBJECTIVES

The following data quality objectives, for allowed uncertainty of assessment methods, and of minimum time coverage and of data capture of measurement, are provided to guide quality-assurance programmes:

	For ozone, $NO_x$ and $NO_2$
Continuous fixed measurement	
Uncertainty of individual measurements	15%
Minimum data capture	90% during summer
	75% during winter
Indicative measurement	
Uncertainty of individual measurements	30%
Minimum data capture	90%
Minimum time coverage	>10% during summer
Modelling	
Uncertainty	
1 hour averages (daytime)	50%
8 hours daily maximum	50%
Objective estimation	
Uncertainty	75%

The uncertainty (on a 95% confidence interval) of the measurement methods shall be evaluated in accordance with the principles laid down in the "Guide to the Expression of Uncertainty of Measurements" (ISO 1993)(1) of the methodology in ISO 5725-1 "Accuracy (trueness and precision) of measurement methods and results" (ISO 1994) or equivalent. The percentages for uncertainty in the table are given for individual measurements, averaged over the period for calculating target values and long-term objectives, for a 95% confidence interval. The uncertainty for continuous fixed measurements should be interpreted as being applicable in the region of the concentration used for the appropriate threshold.

The uncertainty for modelling and objective estimation means the maximum deviation of the measured and calculated concentration levels, over the period for calculating the appropriate threshold, without taking into account the timing of events.

The requirements for minimum data capture and time coverage do not include losses of data due to the regular calibration or normal maintenance of the instrumentation.

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<sup>&</sup>quot;Time coverage" means the percentage of time considered for settling the threshold value during which the pollutant is measured.

<sup>&</sup>quot;Data capture" means the ratio of the time for which the instrument produces valid data, to the time for which the statistical parameter or aggregated value is to be calculated.

<sup>(1)</sup> Copies of these International Standards Organisation publications can be purchased from the British Standards Institution "BSI" sales department either by telephone on 020-8996-9001 or by post from the BSI, Standards House, 389 Chiswick High Road, London, W4 4AL

## PART II

#### RESULTS OF AIR QUALITY ASSESSMENT

The following information should be compiled for zones within which sources other than measurements are employed to supplement information from measurement:

- a description of the assessment activities carried out;
- specific methods used, with references to descriptions of the method;
- sources of data and information;
- a description of results, including uncertainties and, in particular, the extent of any area within the zone over which concentrations exceed long-term objectives or target values;
- for long-term objectives or target values whose object is the protection of human health, the population potentially exposed to concentrations in excess of the threshold.

The Department shall ensure that maps are compiled showing concentration distributions within each zone.