This document is meant purely as a documentation tool and the institutions do not assume any liability for its contents

COUNCIL DECISION

of 27 January 1997

establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States

(97/101/EC)

(OJ L 35, 5.2.1997, p. 14)

Amended by:

<u>B</u>

Official Journal

		No	page	date
<u>M1</u>	Commission Decision 2001/752/EC of 17 October 2001	L 282	69	26.10.2001
► <u>M2</u>	Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008	L 152	1	11.6.2008

Corrected by:

►<u>C1</u> Corrigendum, OJ L 334, 18.12.2001, p. 35 (2001/752/EC)

COUNCIL DECISION

of 27 January 1997

establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States

(97/101/EC)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community and in particular Article 130s (1), thereof,

Having regard to the proposal from the Commission (1),

Having regard to the Opinion of the Economic and Social Committee (2),

Acting in accordance with the procedure laid down in Article 189c of the Treaty (3),

- (1) Whereas the fifth European Community action programme on the environment (4) provides for the collection of baseline data on the environment and an improvement in their compatibility, comparability and transparency;
- (2) Whereas the objectives and tasks of the European Environment Agency are set out in Council Regulation (EEC) No 1210/90 of 7 May 1990 on the establishment of the European Environment Agency and the European Environment Information and Observation Network (5);
- (3) Whereas it is necessary to establish a procedure for the exchange of information on air quality in order to help combat pollution and nuisance, with a view to improving the quality of life and environment throughout the Community, through monitoring long-term trends and improvements resulting from national and Community legislation to combat air pollution;
- (4) Whereas duplication in transferring information should be avoided, in particular as regards information to be transmitted to the European Environment Agency and the Commission;
- (5) Whereas experience built up as the result of exchanges of information pursuant to Council Decision 75/441/EEC of 24 June 1975 establishing a common procedure for the exchange of information between the surveillance and monitoring networks based on data relating to atmospheric pollution caused by certain compounds and suspended particulates (6) and by Council Decision 82/459/EEC of 24 June 1982 establishing a reciprocal exchange of information and data from networks and individual stations measuring air pollution within the Member States (7) makes it possible to establish a more complete and representative

(2) OJ No C 110, 2. 5. 1995, p. 3.

⁽¹⁾ OJ No C 281, 7. 10. 1994, p. 9.

⁽³⁾ Opinion of the European Parliament of 16 June 1995 (OJ No C 166, 3. 7. 1995, p. 177), Council Common Position of 26 February 1996 (OJ No C 219, 27. 7. 1996, p. 1) and Decision of the European Parliament of 18 September 1996 (OJ No C 320, 28. 10. 1996, p. 74).

⁽⁴⁾ OJ No C 138, 17. 5. 1993, p. 5.

⁽³⁾ OJ No L 120, 11. 5. 1990, p. 1.
(6) OJ No L 194, 25. 7. 1975, p. 32. Decision repealed by Decision 82/459/EEC (OJ No L 210, 19. 7. 1982, p. 1).

⁽⁷⁾ OJ No L 210, 19. 7. 1982, p. 1.

- exchange of information by increasing the number of pollutants considered and by including networks and individual stations measuring ambient air pollution;
- (6) Whereas a distinction should be made between information that must always be transmitted, in particular relating to Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management (1) (hereinafter referred to as 'the Directive on air quality'), and information that must be submitted where it is available;
- (7) Whereas the information collected needs to be sufficiently representative to enable pollution levels to be mapped throughout the Community;
- (8) Whereas using common criteria for validating and processing the measurement results will increase the compatibility and comparability of the data transmitted,

HAS ADOPTED THIS DECISION:

Article 1

Objectives

- 1. A reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution, hereinafter referred to as 'reciprocal exchange', is hereby established. It shall apply to:
- networks and stations, covering detailed information describing the air-pollution monitoring networks and stations operating in the Member States,
- measurements of air quality obtained from stations: the exchange covers data calculated in accordance with points 3 and 4 of Annex I from measurements of air pollution by stations in the Member States.
- 2. The Commission and the bodies referred to in Article 6 shall be responsible for the operation of the reciprocal exchange. In order to benefit from the experience acquired by the European Environment Agency and within its sphere of competence, the Commission shall call upon the Environmental Agency, *inter alia* as regards the operation and practical implementation of the information system.

Article 2

Pollutants

- 1. The reciprocal exchange shall cover the air pollutants listed in Annex I to the Directive on air quality.
- 2. Within the framework of the reciprocal exchange, the Member States shall also report on air pollutants listed in point 2 of Annex I to the extent that the relevant data are available to the bodies mentioned in Article 6 and are measured continuously by Member States.

Article 3

Stations

The reciprocal exchange, within the meaning of Article 1, covers stations:

⁽¹⁾ OJ No L 296, 21. 11. 1996, p. 55.

- which are used in the framework of the implementation of directives adopted in accordance with Article 4 of the Directive on air quality,
- which, without being covered by the directives referred to in the first indent, will be selected for this purpose amongst existing stations at national level by the Member States in order to estimate local pollution levels for pollutants listed under point 2 of Annex I and regional (so called 'background') pollution levels for all pollutants listed in Annex I,
- as far as possible, which took part in the reciprocal exchange of information established by Decision 82/459/EEC, provided that they are not covered by the second indent.

Article 4

Required information on networks and stations

- 1. The information to be communicated to the Commission shall concern the characteristics of the measurement stations, the measurement equipment and the operational procedures followed in those stations and the structure and organization of the network to which they belong. This information shall be transmitted unless it has been made available to the Commission within the existing legislation on air quality. The information required is specified on an indicative basis in Annex II. In accordance with the procedure laid down in Article 7, the Commission shall specify the minimum information which Member States shall transmit.
- 2. As regards stations referred to in the first indent of Article 3 the reciprocal exchange will apply once the legislation referred to in Article 4 of the Directive on air quality is in force.
- 3. Six months after the entry into force of this Decision at the latest, the Commission will make available to the Member States the existing data base containing the information already collected by its services on the subject, and software enabling it to be used and updated. The Member States shall correct, amend and/or supplement that information. The updated computer files shall be sent to the Commission during the second year following the entry into force of this Decision and by 1 October at the latest.

This information will be accessible to the public via an information system set up by the European Environment Agency; it may also be supplied by the Agency or by the Member States upon request.

- 4. In accordance with the procedure laid down in Article 7, the Commission shall specify the technical procedures for the transfer of information, taking into account the provisions of Article 1 (2).
- 5. Following the first sending of information by the Member States, the Commission shall include the information transmitted in its data base and prepare each year a technical report on the information collected; it shall make available to the Member States the updated 'networks-stations' data base at the latest by 1 July. The Member States shall correct, amend and/or supplement that information. The updated computer files shall be sent to the Commission by 1 October at the latest.

Article 5

Information to be provided on data obtained by stations

- 1. The Commission shall be provided with the following results:
- (a) data as defined in points 3 and 4 of Annex I for those stations referred to in the first indent of Article 3 and selected according to criteria specified in directives adopted in accordance with

- Article 4 of the Directive on air quality; account shall be taken of the various conditions of air quality in each Member State for the selection of those stations;
- (b) at least annual data as defined in point 4 of Annex I for all the other stations referred to in the second indent of Article 3;
- (c) data as defined in points 3 and 4 of Annex I for all the stations referred to in the third indent of Article 3.

These data shall be transmitted unless they have been made available to the Commission under the existing legislation on air quality.

- 2. The Member States shall be responsible for validating the data transmitted or used to calculate the values transmitted in accordance with the general rules set out in Annex III. Any aggregation of data and the calculation of statistics by a Member State shall comply with criteria at least as stringent as those indicated in Annex IV.
- 3. The Member States shall transmit the results for the calendar year by 1 October of the following year at the latest; the first transfer shall cover the calendar year 1997.
- 4. As fas as possible, the Member States shall transmit to the Commission the information collected from 1 October 1989 to the date of entry into force of this Decision by the stations which took part in the reciprocal exchange of information established by Decision 82/459/EEC.
- 5. In accordance with the procedure laid down in Article 7, the Commission shall specify the technical procedures for the transfer of results, taking into account the provisions of Article 1 (2).
- 6. The Commission shall include the data transmitted in its data base and prepare each year a technical report on the information collected and shall make available to the Member States the updated 'results' data base

The information will be accessible to the public via an information system set up by the European Environment Agency; it may also be supplied by the Agency upon request.

The information, whether accessible, supplied or included in the report, will be based only on validated data.

- 7. The Commission shall prepare a general report for the public, summarizing the collected data and outlining the underlying trends in air quality in the European Union.
- 8. In agreement with the Member States, the Commission shall ensure the transfer to international bodies of selected data needed for the purposes of various international programmes.

Article 6

Each Member State shall designate one or several bodies responsible for the implementation and operation of the reciprocal exchange and shall forthwith inform the Commission thereof.

Article 7

In accordance with the procedure laid down in Article 12 of the Directive on air quality, the Commission shall specify, where appropriate:

- the preparation and updating of procedures concerning the transfer of data and information,
- liaison with the activities undertaken by the European Environment Agency in the field of air pollution,

▼ <u>M2</u>			
	_	 	-
▼ B			

Article 8

No later than the end of a five-year period following the entry into force of this Decision, the Commission shall submit to the Council a report on its implementation. This report shall be accompanied by any proposal the Commission deems appropriate to amend this Decision.

Article 9

This Decision shall apply with effect from 1 January 1997.

Article 10

This Decision is addressed to the Member States.

ANNEX I

LIST OF POLLUTANTS, STATISTICAL PARAMETERS AND UNITS OF MEASUREMENT

- 1. Pollutants listed in Annex I to Directive 96/62/EC on air quality
- 2. Pollutants not listed in Annex I to Directive 96/62/EC on air quality

Pollutants to be reported under Directives other than Directive 96/62/EC are listed in Section 3 under Nos 14 and 15. Pollutants only to be reported if available are listed under Nos 16 to 63.

3. Pollutants, units of measurement, averaging times:

No	ISO-code (¹)	Formula	Name of pollutant	Units of measure- ment (2)	Average over (3)	Expressed as	Relevant Directives (4)		
Pollutants listed in Annex I of the Directive 96/62/EC on air quality									
1	01	SO ₂	sulphur dioxide	μg/m ³	1 h		1999/30/EC 80/779/EEC 89/427/EEC (5)		
2	03	NO ₂	nitrogen dioxide	μg/m ³	1 h		1999/30/EC 85/203/EEC		
3	24	PM ₁₀	suspended parti- culates (<10 µm)	μg/m ³	24 h		1999/30/EC 96/62/EC		
4	39	PM _{2,5} (6)	suspended parti- culates (<2,5 µm)	μg/m ³	24 h		1999/30/EC 96/62/EC		
5	22	SPM	suspended parti- culates (total)	μg/m ³	24 h		80/779/EEC 89/427/EEC		
6	19	Pb	lead	μg/m ³	24 h		1999/30/EC 82/884/EC		
7	08	O ₃	ozone	μg/m ³	1 h		92/72/EEC		
8	V4	C ₆ H ₆	benzene	μg/m ³	24 h		96/62/EC 2000/69/EC		
9	04	СО	carbon monoxide	►C1 mg/ m³ ◀	1 h		96/62/EC 2000/69/EC		
10	82	Cd (⁷)	cadmium	ng/m ³	24 h		96/62/EC		
11	80	As	arsenic	ng/m ³	24 h		96/62/EC		
12	87	Ni	nickel	ng/m ³	24 h		96/62/EC		
13	85	Нg	mercury	ng/m ³	24 h		96/62/EC		
Pollutants to be reported under other EU Directives									
14	11	BS	black smoke	μg/m ³	24 h		80/779/EEC 89/427/EEC		
15	35	NO _x	nitrogen oxides	μg/m ³	1 h	NO ₂ equivale- nt	1999/30/EC		

No	ISO- code (¹)	Formula	Name of pollutant	Units of measure- ment (2)	Average over (3)	Expressed as	Relevant Directives (4)	
Other	Other pollutants (8)							
16	V8	C2H ₆	ethane	μg/m ³	24 h			
17	V9	H ₂ C=CH ₂	ethene (ethylene)	μg/m ³	24 h			
18	V3	НС=СН	ethine (acetylene)	μg/m ³	24 h			
19	VN	H ₃ C-CH ₂ -CH ₃	propane	μg/m ³	24 h			
20	VP	CH ₂ =CH-CH ₃	propene	μg/m ³	24 h			
21	V6	H ₃ C-CH ₂ -CH ₂ -CH ₃	n-butane	μg/m ³	24 h			
22	V5	H ₃ C-CH(CH ₃) ₂	iso-butane	μg/m ³	24 h			
23	V1	H ₂ C=CH-CH ₂ -CH ₃	1-butene	μg/m ³	24 h			
24	V2	H ₃ C-CH=CH-CH ₃	trans-2-butene	μg/m ³	24 h			
25	V7	H ₃ C-CH=CH-CH ₃	cis-2-butene	μg/m ³	24 h			
26	V0	CH ₂ =CH-CH=CH ₂	butadiene 1,3	μg/m ³	24 h			
27	VK	H ₃ C-(CH ₂) ₃ -CH ₃	n-pentane	μg/m ³	24 h			
28	V1	$H_3C-CH_2-CH(CH_3)_2$	iso-pentane	μg/m ³	24 h			
29	VL	H ₂ C=CH-CH ₂ -CH ₂ -CH ₃	1-pentene	μg/m ³	24 h			
30	VM	H ₃ C-HC=CH-CH ₂ -CH ₃	2-pentene	μg/m ³	24 h			
31	VF	$H_2C=CH-C(CH_3)=CH_2$	isoprene	μg/m ³	24 h			
32	VD	C ₃₆ H ₁₄	n-hexane	μg/m ³	24 h			
33	n.a. (9)	(CH ₃) ₂ -CH-CH ₂ -CH ₂ - CH ₃	i-hexane	μg/m ³	24 h			
34	VC	C ₇ H ₁₆	n-heptane	μg/m ³	24 h			
35	VH	C ₈ H ₁₈	n-octane	μg/m ³	24 h			
36	VG	(CH ₃) ₃ -C-CH ₂ -CH- (CH ₃) ₂	iso-octane	μg/m ³	24 h			
37	VQ	C ₆ H ₅ -CH ₃	toluene	μg/m ³	24 h			
38	VA	$C_6H_5-C_2H_5$	ethyl benzene	μg/m ³	24 h			
39	VU	m,p-C ₆ H ₄ (CH ₃) ₂	m,p-xylene	μg/m ³	24 h			
40	VV	o-C ₆ H ₄ -(CH ₃) ₂	o-xylene	μg/m ³	24 h			
41	VS	C ₆ H ₃ -(CH ₃) ₃	1,2,4-trimethylbenzene	μg/m ³	24 h			
42	VR	C ₆ H ₃ (CH ₃) ₃	1,2,3-trimethylbenzene	μg/m ³	24 h			
43	VT	C ₆ H ₃ (CH ₃) ₃	1,3,5-trimethylbenzene	μg/m ³	24 h			
44	VB	НСНО	formaldehyde	μg/m ³	1 h			

No	ISO- code (¹)	Formula	Name of pollutant	Units of measure- ment (2)	Average over (3)	Expressed as	Relevant Directives (4)
45	20	THC (NM)	total non-methane hydrocarbons	μg/m ³	24 h	C equivale- nt	
46	10	SA	strong acidity	μg/m ³	24 h	SO ₂ equivale- nt	82/459/EEC (alternative to SO ₂)
47	n.a.	PM ₁	suspended parti- culates (<1 µm)	μg/m ³	24 h		96/62/EC
48	16	CH ₄	methane	μg/m ³	24 h		
49	83	Cr	chromium	ng/m ³	24 h		
50	90	MN	manganese	ng/m ³	24 h		
51	05	H ₂ S	hydrogen sulphide	μg/m ³	24 h		
52	n.a.	CS ₂	carbon disulphide	μg/m ³	1 h		
53	n.a.	C ₆ H ₅ -CH=CH ₂	styrene	μg/m ³	24 h		
54	n.a.	CH ₂ =CH-CN	acrylonitrile	μg/m ³	24 h		
55	НЗ	C1CHCC1 ₂	trichloroethylene	μg/m ³	24 h		
56	H4	C ₂ C1 ₄	tetrachloroethylene	μg/m ³	24 h		
57	n.a.	CH ₂ C1 ₂	dichloromethane	μg/m ³	24 h		
58	P6	BaP	benzo(a)pyrene	ng/m ³	24 h		
59	n.a.	VC	vinyl chloride	μg/m ³	24 h		
60	09	PAN	peroxyacetyl nitrate	μg/m ³	1 h		
61	21	NH ₃	ammonia	μg/m ³	24 h		
62	n.a.	N-dep.	wet nitrogen deposition	mg/ (m ² * month)	1 month	N equivale- nt	
63	n.a.	S-dep.	wet sulphur deposition	mg/ (m ² * month)	1 month	S equivale- nt	

⁽¹⁾ ISO 7168-2: 1999.

(⁹) Not available.

Data, calculated over the calendar year, to be transmitted to the Commission

Member States shall send raw data or shall send raw data and statistics.

For those Member States who transfer raw data and statistics the following statistics are required.

— For pollutants 1 to 61:

the arithmetic mean, the median, the percentiles 98 (and 99,9 which may be transmitted on a voluntary basis for pollutants for which the mean is calculated over one hour) and the maximum calculated from raw data

Use at least two figures for each value reported, e.g. 1,4 mg/m³ or 21 µg/m³. Some measurement techniques involve sampling times from a few minutes up to several weeks. In such a case values with different averaging times differing from those listed in this column can be reported indicating the actual averaging period.

(4) Directives in force when the revised Annexes to the exchange of information Decision enter into force.

Amending Directive 80/779/EEC.

No reference method available for PM2,5 (particulate matter) when the revised Annexes to the exchange of information Decision enter into force.

For heavy metals and PAH, community legislation is currently under preparation that is expected to result, in particular, in a list of specific PAH substances and proposals for amendments to this Decision as necessary.

If available.

corresponding to the recommended averaging times indicated in the table above,

— for pollutants 62 and 63:

total monthly deposition, calculated from raw data corresponding to the recommended averaging times indicated in the table above.

The yth percentile should be selected from the values actually measured. All the values should be listed in increasing order:

$$X_1 <= X_2 <= X_3 <= \dots <= X_{N-1} <= X_N$$

The y^{th} percentile is the concentration X_k , where the value of k is calculated as follows:

$$\mathbf{k} = (\mathbf{q} \times \mathbf{N})$$

with q being equal to y/100 and N the number of values actually measured.

The value of $(q \times N)$ should be rounded off to the nearest whole number.

All the results should be expressed at the following conditions of temperature and pressure: 293 K and 101,3 kPa, except for pollutants 62 and 63. For particle bound components, data from the year 2001 and onwards should be reported at ambient conditions.

5. Data transmission to the Commission:

Data shall be transmitted by one of the following data formats: ISO 7168 version 2 extended format, NASA-AMES 1001/1010 or DEM (¹) compatible format; or in DEM database:

The Commission will confirm receipt of data and the number of stations and pollutants.

⁽¹⁾ Data exchange module provided on behalf of the European Commission.

ANNEX II

INFORMATION CONCERNING NETWORKS, STATIONS AND MEASUREMENT TECHNIQUES

Member States shall report on the following points: I.1, I.4.1 to I.4.4, I.5, II.1.1, II.1.4, II.1.8, II.1.10, II.1.11 and II.2.1. To the extent possible, as much information as feasible should be supplied on the other points:

- I. INFORMATION CONCERNING NETWORKS
- I.1. Name
- I.2. Abbreviation
- I.3. Type of networks (local industry, town/city, urban area, county, region, entire country, international, etc.)
- I.4. Body responsible for network management
- I.4.1. Name
- I.4.2. Name of person responsible
- I.4.3. Adress
- I.4.4. Telephone and fax numbers
- I.4.5. e-mail
- I.4.6 Website address
- I.5. Time reference basis (UTC, local)
- II. INFORMATION CONCERNING STATIONS
- II.1. General information
- II.1.1. Name of the station
- II.1.2. Name of the town/city of location when applicable
- II.1.3. National and/or local reference number or code
- II.1.4. Station code given under the present decision and to be provided by the Commission
- II.1.5. Name of technical body responsible for the station (if different from that responsible for the network)
- II.1.6. Bodies or programmes to which data are reported (by compound, if necessary) (local, national, European Commission, GEMS, OECD, EMEP, etc.)
- II.1.7. Monitoring objective(s) (compliance with the requirements of legal instruments exposure assessment (human health and/or ecosystems and/or materials), trend analysis, emission assessment, etc.)
- II.1.8. Geographical coordinates (according to ISO 6709: geographical longitude and latitude and geodetic altitude)
- II.1.9. NUTS level IV (nomenclature des unités territoriales statistiques)
- II.1.10. Pollutants measured
- II.1.11. Meteorological parameters measured
- II.1.12. Other relevant information: prevailing wind direction, ratio between distance from and height of closest obstacles, etc.
- II.2. Classification of station
- II.2.1. Type of area
- II.2.1.1. Urban:

continuously built-up area

II.2.1.2. Suburban:

largely built-up area: continuous settlement of detached buildings mixed with non-urbanised areas (small lakes, woods, agricultural)

▼M1

II.2.1.3. Rural (1):

all areas that not fulfil the criteria for urban/suburban areas

- II.2.2. Type of station in relation to dominant emission sources
- II.2.2.1. Traffic:

stations located such that their pollution level is influenced mainly by emissions from a nearby road/street

II.2.2.2. Industrial:

stations located such that their pollution level is influenced mainly by nearby single industrial sources or industrial areas

II.2.2.3. Background:

stations that are neither traffic nor industrial (2)

- II.2.3. Additional information about the station
- II.2.3.1. Area of representativeness (radius). For traffic stations, give instead the length of street/road that the station represents
- II.2.3.2. Urban and suburban stations
 - population of town/city
- II.2.3.3. Traffic stations
 - assessed traffic volume (annual average daily traffic)
 - distance from kerb
 - heavy-duty fraction of traffic
 - traffic speed
 - distance between and height of building facades (street canyons)
 - width of street/road (non-canyon streets)
- II.2.3.4. Industrial stations
 - type of industry(ies) (selected nomenclature for air pollutants code)
 - distance to source/source area
- II.2.3.5. Rural background stations (subcategories)
 - near-city
 - regional
 - remote
- III. INFORMATION CONCERNING MEASUREMENT CONFIGURATION BY COMPOUND
- III.1. Equipment
- III.1.1. Name
- III.1.2. Analytical principle or measurement method
- III.2. Characteristics of sampling
- III.2.1. Location of sampling point (facade of building, pavement, kerbside, courtyard, etc.)
- III.2.2. Height of sampling point
- III.2.3. Result-integrating time
- III.2.4. Sampling time

⁽¹⁾ If the station is measuring ozone additional information on the status of rural background is to be provided (II.2.3.5).

⁽²⁾ Located such that their pollution level is not mainly influenced by any single source or street but rather by the integrated contribution from all sources upwind of the station (e.g. by all traffic, combustion sources, etc. upwind of a station in a city or by all upwind source areas (cities, industrial areas) in a rural area).

ANNEX III

DATA VALIDATION PROCEDURE AND QUALITY ASSURANCE

All transmitted data are deemed to be valid.

It is the responsibility of the Member States to ensure that a quality assurance procedure is in place, which meets in general the objectives of this Decision and in paricular the objectives of the relevant Directives.

ANNEX IV

CRITERIA FOR THE AGGREGATION OF DATA AND THE CALCULATION OF STATISTICAL PARAMETERS

These criteria mainly concern the data capture

If criteria for the aggregation of data and the calculation of statistical parameters have not been laid down in EU directives the following applies:

(a) Aggregation of data

The criteria for the calculation of one-hour and 24-hour values from data with a smaller averaging time are

— for one-hour values: Minimum data capture 75 %,

— for 24-hour values: At least 13 one-hour values available,

not more than six successive one-hour

values missing.

(b) Calculation of statistical parameters

— for the mean and the median: minimum data capture 50 %,

— for the percentiles 98, 99,9 and the minimum data capture 75 %.

maximum:

The ratio between the number of valid data for the two seasons of the year considered cannot be greater than 2, the two seasons being winter (from January to March inclusive and from October to December inclusive) and summer (from April to September inclusive).