COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 26.06.2008 SEC(2008) 2132

STAFF WORKING PAPER accompanying the

COMMUNICATION FROM THE COMMISSION ON NOTIFICATIONS OF POSTPONEMENTS OR ATTAINMENT DEADLINES AND EXEMPTIONS FROM THE OBLIGATION TO APPLY CERTAIN LIMIT VALUES PURSUANT TO ARTICLE 22 OF DIRECTIVE 2008/50/EC ON AMBIENT AIR QUALITY AND CLEANER AIR FOR EUROPE

{COM(2008) 403 final}

1. INPUT INFORMATION FOR THE ASSESSMENT OF NOTIFICATIONS OF POSTPONEMENTS OR EXEMPTIONS

1.1. Introduction

According to Article 22 of Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe¹, hereinafter "the new Directive", Member States may, in respect of certain zones or agglomerations, postpone the deadline for attaining compliance with the limit values for nitrogen dioxide or benzene for a maximum period of five years, where those limit values cannot be complied with by 1 January 2010, or be exempt from the obligation to apply the limit values for particulate matter (PM₁₀) during a three year period ending June 2011. The postponement or exemption is subject to Member States demonstrating that the following conditions are met in a given zone or agglomeration:

- the limit values for nitrogen dioxide and benzene cannot be achieved by 1 January 2010;
- all appropriate measures have been taken at national, regional and local level to meet the deadlines for the PM₁₀ limit values, i.e. 1 January 2005;
- in respect of PM₁₀ exemptions, the limit values cannot be achieved because of one or more of the following elements: site-specific dispersion characteristics, adverse climatic conditions or transboundary contributions;
- compliance with the limit values will be achieved at the expiry of the postponement or exemption period.

Member States bear the burden of proof that those conditions are fulfilled and they must therefore provide the Commission with all the relevant information needed for its assessment. If the Commission considers that those conditions have not been met, it may raise objections within nine months of receipt of a notification of such postponement or exemption.

Further guidance on the scope of the conditions attached to the postponements or exemptions as well as on the notification procedure can be found in Commission Communication (COM(...)..) on notifications of postponements of attainment deadlines and exemptions from the obligation to apply certain limit values pursuant to Article 22 of Directive 2008/50/EC, hereinafter "the Communication".

1.2. Objective

This Staff Working Paper specifies the input information required from Member States for substantiating that the conditions for a postponement or exemption are fulfilled.

Postponements or exemptions will, in accordance with Article 22 of the new Directive, apply in respect of a given zone or agglomeration and, as a consequence, the information required must reflect that level, i.e. the data must be relevant not only to the national and regional level but also the local level. This degree of detail puts a significant burden on both Member States

EN EN

OJ L 152, 11.6.2008, p. 1.

and the Commission and, in order to lessen that burden and to facilitate the notification procedure for Member States and ensure an efficient and transparent assessment of the notifications by the Commission, a set of forms have been drawn up summarizing the essential information required.

Commission Decision 2004/224/EC of 20 February 2004 laying down arrangements for the submission of information on plans or programmes required under Council Directive 96/62/EC in relation to limit values for certain pollutants in ambient air² has served as a basis for developing the forms in this Staff Working Paper.

The forms may serve as a checklist for Member States that all necessary information has been provided and Member States are therefore strongly recommended to use them for submitting their notifications. Moreover, they allow Member States to use one document covering several zones, instead of submitting several extensive and sometimes overlapping documents for every single zone concerned. However, it should be stressed that the forms do not replace the obligation to provide an air quality plan for each zone or agglomeration concerned.

In completing the forms, common sense should be applied. The forms have been drawn up in order to respond to the diversity that characterises ambient air quality in the Community. Against that background, Member States need only to enter information that is relevant to their specific cases and that should reasonably be available as essential elements of the compulsory air quality plan or as elements supporting the fulfilment of the conditions. The intention is not to require Member States to develop new data, for instance through modelling. Where information is relevant for several zones, bundling together of that information is recommended.

In order to ensure equal treatment it is important for the Commission to be able to carry out the assessments on the basis of comparable data. It will use the forms for that purpose to structure the information provided.

1.3. General description of the forms

The bulk of the information essential for the assessment of the conditions under Article 22 Directive 2008/50/EC is well covered by the minimum requirements of the air quality plan as outlined in Section A of Annex XV to that Directive. A well established practice for providing this minimum information is defined by Decision 2004/224/EC, which has been developed together with the Member States for the purpose of communicating the existence of a plan with all its essential elements. This same structure is now considered, with the forms deviating from Decision 2004/224/EC only in the following points:

- information not necessary for the assessment is indicated in strike-through mode (forms from Decision 2004/224/EC are used), new or revised parts are shown in bold while the parts which are identical to the forms in Decision 2004/224/EC are shown in grey;
- source apportionment and the estimate of the spatial impact of the measure are slightly more elaborate to enable the Commission to carry out its overall assessment exercise including the assessment of the impact of existing and planned Community measures;

EN EN

.

OJ L 68, 6.3.2004, p. 27.

Annexes have been added to the initial forms of Decision 2004/224/EC to enable a structured presentation of this data;

- notes to several forms are updated for clarity and to facilitate filling in the forms;
- new forms are added as compared to Decision 2004/224/EC to hold additional essential information, where required by the explicit conditions of Article 22, e.g. Form 3 has been replaced by Forms 3A and 3B, optional Form 6 has been replaced by a new form, Forms 8-10 are added; some are to be filled only where appropriate; new forms follow the internal structure of Decision 2004/224/EC and are accompanied by comprehensive notes.

1.4. Rationale of the Forms

1.4.1. Form 1

Form 1 covers general information on the notification as well as practical information, such as contact persons. It should be stressed that two contact persons are requested. The Annex to Form 1 provides placeholders for information on relevant publications used for the purposes of drawing up the notification and the Air Quality plan. This information is relevant in order to fully assess and understand the elements included in the Air Quality Plan.

1.4.2. Form 2

Form 2 is intended to create a link between the assessed exceedances (monitored or modelled) and the abatement measures. It thus always refers to a certain 'reference year' for which this exceedance has been assessed (see Section 4.1 in the Communication for which reference year to use).

The 'exceedance situation' is the minimum spatial area which the abatement measures should be targeting. This enables a clear distinction, where necessary, between different types of exceedances within a single zone that have prompted different measures. Examples would be a larger agglomeration where there is a 'classic' exceedance mainly due to traffic in the centre, and a specific industry related exceedance situation in the suburban industrial zone. Such distinction facilitates as well all subsequent description of abatement measures also across air quality zones, as 'similar' exceedance situations may be bundled within the subsequent forms, for example those linked to source apportionment (Form 3A), failure to comply by the initial deadline (Form 3B), or specific conditions (Form 10).

1.4.3. Form 3A

Source apportionment in Form 3A represents the essential information needed for the preparation of a pollution abatement strategy. It must therefore be considered for each specific exceedance situation as the local sources may vary. A detailed analysis may, however, only be necessary for a few representative situations allowing the results of the analysis to be applied throughout the Member State, adjusting it only as necessary due to the local specificity. Form 3A enables to use single source apportionment for several exceedance situations if the Member States finds that appropriate. The methodology that should be referred to in the Form is expected to provide more detail on the underlying assumptions.

1.4.4. Form 3B

Form 3B is intended to minimize the information and resources required to assess why compliance could not be achieved by the initial deadline. This single form replaces a detailed description of the process within a particular zone or agglomeration (for example assessment of the situation in 2003, following development and implementation of plans and programmes and their abatement measures, analysis of impact of individual measures) which would otherwise be required. The information required in this Form presupposes that the Member State has been working under the assumption that all measures are taken with a view to achieve compliance by the deadline, and thus only provides a way to explain why this assumption was not realized (for example less reduction in transboundary contribution than expected, lower efficiency of a specific measure etc.), structured according to the source apportionment. The detail of the explanation should be in proportion to the importance of the contribution to the exceedance and further referenced, where appropriate.

The Commission expects that for zones or agglomerations for which a notification of a postponement or exemption is being considered, such analysis has already been made within the last two years, in order to identify which pollution sources have not yet been successfully addressed, update the air quality plans, and for considering the measures listed in Section B of Annex XV. It should not require additional information gathering, for instance through modelling, but only the provision of available information in the appropriate sectoral placeholders. Again, if appropriate, the same information may be presented for several exceedance situations together.

1.4.5. Forms 4A, 4B, and Forms 5A, 5B and Annexes to those Forms, and Form 7 and Annexes to that Form

Air quality is continuously changing due to implementation of existing measures and external developments, and due to additional measures being taken in order to ensure compliance. The snapshot of this continuous change is described by the baseline (Forms 4) and the total impact of the measures in Forms 5A and B and Annexes to those Forms.

All measures need to be identified only once through Form 7, where they are given a code. This code is then referred to in other Forms as relevant (such as in Form 3B, or Forms 5). National measures will, for example, appear when addressing any exceedance situation. Their impact may, however, be different (for example the impact of a national measure addressing chicken farming would not be significant in most cases of urban exceedance).

Often the impact of individual measures is not possible to determine or cannot be determined with reasonable accuracy – in those cases bundling of impacts (such as in the Annexes to Form 7) of related measures, for examples those addressing public transport in an agglomeration, should be considered. That is easily achieved by referring to all bundled measures in the appropriate 'Code(s) of the measure' row.

The description of the efforts to achieve compliance by the original deadline is addressed already through Form 3B. Annex A to Form 7, Form 5A and the Annex to Form 5A complement Form 3B in providing placeholders for explaining specific aspects of the measures taken. Those Forms may, however, be considered optional, as it is possible to present the information essential for the assessment only through Form 3B.

1.4.6. Forms 6, 8, 9 and 10

Forms 6, 8, 9 and 10 cover specific assessment requirements resulting from the Directive, i.e. the information required pursuant to Section B of Annex XV to the Directive and the specific condition applying to PM10 exemptions.

2. NOTES TO ALL FORMS

2.1. General notes on completion of the forms

In completing the forms, references must be given to documentation provided as part of the notification, including to the relevant pages, in addition to the summary information presented in the forms. Providing only references without a summary (or, where relevant, the quantitative indicator) is to be avoided.

All empty (not dashed) cells in the forms must be completed. The following codes are to be used, if necessary:

- 'N/A' (not applicable) is entered where the information is not relevant for the assessment in the specific case (e.g. cells related to primary NO2 for PM10 or benzene exceedance situations);
- 'UNAVAILABLE' is entered whenever the information for a given cell is unknown or not available. As this might impair the ability to assess, a justification of why this information is unavailable plus a reference to related information that might support the assessment must be provided. It is recommended that this code is used also in those cases where the Member State considers that the requested information is not significant for the assessment in order to indicate that a further request for such information by the Commission would not be successful;
- 'NS' (not significant) is to be used primarily in cells describing non-significant quantitative information. The symbol indicates that the required specific information/value is roughly known (at least in terms of 'smaller than' but considered not to be significant for the presentation of the overall information). Examples include sources with a contribution lower than 3% to the stated exceedance (e.g. a sector contribution in total source apportionment, an individual IPPC installation within contribution of industrial sector);
- 'I' (included) indicates that this information is included within some other cell (for example off-road machinery sources included within industry or agriculture). Clarification within the Form and/or reference to further documentation is expected in such case.

2.2. Form 1: General information on the notification

This Form is required in the assessment process to provide the following information:

- Essential information from the air quality plan
- A list of the exceedance situations covered in forms 2 to 10
- Contact details for requests for additional information or clarification for the purposes of the assessment of the notification

Forn	Form 1: General information on the air quality plan				
a.	Reference year				
b.	Member State				
C.	Reference to the notification				
d.	List of the code numbers of the exceedance situations described in Forms 2 to 10				
e.	Name of the authority responsible for drafting the notification addressing the exceedance situation				
f.	Postal address of the responsible authority				
g.	Names of the contact persons				
h.	Postal addresses of the contact persons				
i.	Telephone numbers of the contact persons				
j.	Fax numbers of the contact persons				
k.	E-mail addresses of the contact persons				
1.	Comments for clarification if needed				

Notes on Form 1

Sub a: Year for which this exceedance has been assessed (see Section 4.1 in the Communication for which reference year to use). It is expected that the same reference year is used in the air quality plan and subsequent Forms, unless explicitly identified otherwise in the Forms.

Sub b: The Member State shall be indicated using the following codes Belgium: BE; Bulgaria: BU; Czech Republic: CZ; Denmark: DK; Germany: DE; Estonia: EE; Ireland: IE; ; Greece: EL; Spain: ES; France: FR; Italy: IT; Cyprus: CY; Latvia: LV; Lithuania: LT; Luxemburg: LU; Hungary: HU; Malta: MT; Netherlands: NL; Austria; AT; Poland: PL; Portugal: PT; Romania: RO; Slovenia: SI; Slovakia: SK; Finland; FI; Sweden: SE; United Kingdom: UK.

Sub c: The reference to the **notification** shall be a complete and detailed reference to the document(s) in which the notification is fully described. Detail is to be provided in Annex to Form 1.

Sub g: Enter contact details of at least two persons. If the Commission requires further information on any aspect of this reporting sheet it will contact one of those persons.

2.3. Annex to Form 1: Details and summary of relevant publications for the notification

This form is used in the assessment process for effective filing and information access, providing the following information:

- An overview of the documentation used for the notifications from which the information found in forms 2 to 10 has been derived
- An overview of other available relevant documentation.

Aı	Annex to Form 1: Details and summary of relevant publications for notification			
a.	Reference			
b.	Title of publications/documents/work relevant to the air quality plan(s)			
c.	Author(s)			
d.	Date of publication			
e.	Where published (e.g. consultancy report, academic journal)			
f.	Weblink			
g.	Summary of contents (no more than 0.5 pages of A4)			
h.	Code number(s) of the exceedance situation(s) to which it is relevant			
i.	Relevant page numbers			

Notes on the Annex to Form 1

Note: Only documents containing relevant information for the assessment should be included in the Annex to Form 1. Examples of documents that should be included here include modelling reports, emissions inventory reports etc. It is important that references given in sub a are used consistently in all forms.

Sub a: A unique short reference ID, preferably descriptive (i.e. PLAN, MAPS, EM_INV, EMEP_07_1, DELEEUW08 etc.).

Sub f: If available for direct download, otherwise it should be attached to the notification.

Sub g: May be attached in a separate word document.

Sub h: These should correspond to the code number of the exceedance situation on Form 2 sub a. Optional.

Sub i: Prescribed format : p.[page number] ([data to be found there]); Example p.29 (emissions data for exceedance situation 1); p.40-44 (assumptions used in the measures for exceedance situation 1). Optional.

2.4. Form 2: Description of the exceedance of the limit value

This form is required in the assessment process to provide the following information:

- Essential information from the air quality plan
- Essential information on the exceedance situation in the reference year as stated in Form 1. If information for another year is also provided, this must be clearly indicated by the code number in Sub a, and through a comment in Sub o, in order to avoid inappropriate mixing and merging of information.

Fo	rm 2: Description of the exceedance of the limit value	
a.	Code number of the exceedance situation	
b.	Pollutant	
c.	Zone code	
d.	Name of the city(-ies) or municipality(-ies)	
e.	To be filled in only if the pollutant is $\frac{SO2}{NO2}$, NO2, benzene or PM_{10} : NO2 and benzene limit value for which the LV+MOT was exceeded, PM_{10} limit value $[h/d/a]$	
f.	Concentration level in the reference year:	
	Concentration in μg/m3, or*1	
	Maximum 8-hour mean CO concentration in mg/m3 if applicable, or*2	
	Total number of exceedances expressed in relation to the LV+MOT *1	
g.	To be filled in only if the LV is expressed as number of exceedances of a numerical concentration: total number of exceedances in the reference year expressed in relation to the LV $*1$	
h.	Concentration level in the reference year expressed in relation to the other health related LV of the pollutant concerned, if such an LV exists:	
	Concentration in μg/m3if applicable, or*1	
	Total number of exceedances expressed in relation to the LV if applicable*1	
i.	Concentrations observed in previous years if available and not previously communicated to the Commission	
	Year and concentration in μg/m3if applicable, or*1	
	Year and total number of exceedances expressed in relation to the LV+MOT or LV if applicable*1	
j.	If the exceedance was found by measurement:	
	Code of the station where the exceedance was observed*1	
	Geographical coordinates of the station*1	
	Classification of the station*1	
k.	If the exceedance was found by model calculation:	
	Indication of the location of the exceedance area*1	
	Classification of the area*1	
1.	Estimate of the surface area (km²) where the level was above the LV in the reference year*1	
m.	Estimate of the length of road (km) where the level was above the LV in the reference year*1	
n.	Estimate of the total population exposed to a level above the LV in the reference year*1	
0.	Comments for clarification*1	

 $^{^{1}}$ Give page reference(s) to from where this information is derived in the notification supporting documents, e.g. the air quality plan.

Notes on Form 2

Sub a: Each exceedance situation shall be given a code number that is unique within the Member State.

Sub b: The pollutant shall be indicated by " NO_2 ", "PM10", " C_6H_6 " for benzene.

 $^{^{2}}$ Not to be filled in because CO is not a pollutant covered in the time extensions assessment

Sub c: The zone code shall be identical to the one submitted in the annual questionnaire 2004/461/EC or 2001/839/EC as appropriate of the reference year. In the case where zone codes or affiliation of the exceedance situation to a specific zone have changed before or after the reference year, all relevant zone codes have to be presented using the following format CODE [2001:CODE1;2004:CODE2;2006:CODE3]. CODE specifies zone code in the reference year.

Sub d: If the exceedance area extends over more than one city or municipality, all cities and municipalities where exceedance was found shall be mentioned, separated by a semicolon.

Sub e: The limit value for which the LV+MOT was exceeded, or the limit value for PM10 shall be identified as "h" (based on hourly means), "d" (daily means) or "a" (annual means).

Sub f and h: If the exceedance has been found by modelling, the highest level in the exceedance area shall be given in this and the following forms. **Deviation from this rule must be explicitly referenced and potential implications of the deviation explained.**

Sub i: The information should be given in the form "year: concentration". Entries for several years should be separated by a semicolon. Non-availability of data shall be indicated by "UNAVAILABLE" or more specifically "year: UNAVAILABLE".

Sub i: Annual average concentrations or total number of exceedances each year must be provided between 2001 and 2006 Data must be provided for each station listed under sub j or in adequate summary indicator (e.g. highest modelled concentration) if modelled. While inclusion of data from all monitoring stations with observed exceedance is recommended, a data subset may be chosen that is considered to adequately present the situation. It is expected that, as far as available, every city or municipality within the exceedance area is represented in the subset.

Sub j: "Code of the station where the exceedance was observed" shall be the code that has been used in the annual questionnaire of the reference year (Commission Decision 2001/839/EC, 2004/461/EC as relevant). If the code is different than the EOI code, provide the EOI code as well, using format CODE [EOI:CODEEOI]. Indicate also if the station code has been changing through the reported years.

Sub j: For "geographical coordinates of the station" and "classification of the station", the specifications that are already in use for the exchange of data under the Exchange of Information Decision 97/101/EC shall be used.

Sub k: The codes for "classification of station" shall also be used for "classification of the area". If the exceedance area found by modelling includes more than one class, the class codes shall be given, separated by a semicolon.

Sub I and m: The "surface area (km2) above the LV" indicates the size of the exceedance area concerned. It may be left blank for traffic stations or traffic areas. The "length of road (km) where the level was above the LV" shall only be given for exceedances at traffic stations or, in case of modelling, traffic areas. It indicates the total length of road sections where exceedance occurred on one or both sides.

Sub n: "Population exposure above the LV" indicates an estimate of the average number of people present during the exceedance of the limit value.

Sub o: Provide information regarding the exposure of children or other sensitive groups, where appropriate.

Sub o: For PM10 exceedances state whether the monitoring sites listed in sub j, for which data is presented in sub i, use the reference method, an equivalent method (if so give a page reference to further documentation on demonstration of equivalence), or whether the method is not equivalent. In case of PM_{10} , provide year-specific clarification also if any of the historical data provided under sub i are not corrected to account for potential bias of the non-reference method used.

2.5. Annex to Form 2: Map of exceedance situation

The Annex to Form 2 is required in the assessment process to provide the following information:

A visual indication of the location and extent of the exceedance within each zone

Annex to Form 2: Map of exceedance situation

Paste maps here: (Can be reference if attached to the notification or on-line)

Notes on the Annex to Form 2

The following information must be shown on the map:

- code of the exceedance situation (should correspond to the codes given in Form 2a)
- pollutant and metric of the exceedance situation (e.g. PM₁₀ daily)
- zone/city boundaries (+ zone codes)
- scale bar
- map legend
- measurement stations for the relevant pollutant within the zone (Please give the EoI code of each station)
- · geographical extent of the exceedance of the limit value
- geographical extent of the exceedance of the limit value + margin of tolerance (if applicable)

GIS information is not required and the maps should be provided as an image document (either pasted into Annex 2, or as a separate, referenced document) rather than as a GIS file. Availability of access to GIS files may be indicated.

2.6. Form 3A: Quantitative source apportionment

Form 3A is required to provide a source apportionment of the exceedance situation for the reference year as indicated in Form 1. This Form replaces Form 3 of Decision 2004/224/EC by providing cells for a more explicit split between contributions of different sectors at different spatial scales. Please follow instructions under point 2.1, in case specific information is included somewhere else, not available or considered not to be significant.

If the reference year indicated in Form 1 is different from 2005 for PM10 or 2008 for NO₂ and benzene, sub g should indicate whether the source apportionment for the reference year is relevant also for the situation in 2005 or 2008, as the case may be. Where there are significant differences between the source contributions in the reference year and 2005/2008, those differences must be explained. That explanation may be effectively provided through a second source apportionment for the year in question. In such case the different sets should be clearly identified through the different code of the exceedance situation (see also Form 2).

The information provided in Form 3A will primarily be used to assess whether the predicted reductions in future years are realistic, as the potential impact of measures addressing a certain source is closely linked to its contribution to the exceedance.

The information provided in Form 3A will also be used to determine which categories of measures would be appropriate for each exceedance and for assessing whether all appropriate measures have been taken to achieve compliance by the initial attainment dates.

The Form can be used to describe several exceedance situations, if appropriate. This is also one of the reasons why the source apportionment is expressed in percentages.

Form 3A: Quantitative source apportionment	
a. Code(s) of exceedance situation	
b. Estimate of split for regional background PM ₁₀ *1	
Total *2	
From within Member State*2	
Transboundary*2	
Natural*2	
Other (please specify)*2	
c. Estimate of split for regional background NOX / benzene	
Total*2	
From within Member State*2	
Transboundary*2	
d. Estimate of split for (urban) background PM10 / NOX / benzene increment	
Total*2	
Traffic*2	
Industry including heat and power production*2	
Agriculture*2	
Commercial and residential*2	
Shipping*2	
Off road mobile machinery2	
Natural*2	
Transboundary urban background (please specify the source)*2	
Other (please specify)*2	
e. Estimate of split for local PM10 component / NOx / benzene increment	
Total*2	
Traffic*2	
Industry including heat and power production*2	
Agriculture*2	
Commercial and residential*2	
Shipping*2	
Off road mobile machinery*2	
Natural*2	
Transboundary local (please specify the source)*2	
Other (please specify)*2	
f. Reference to the emission inventory used in the course of the analysis*2	
g. Comments for clarification	

¹ The split needs to be completed to the maximum extent; in specific situations, a further split may be necessary to justify the claim (e.g. where claiming transboundary condition, the split within/outside Member State). A split primary/secondary PM_{10} as well as contributions from outside Member State/outside EU may also be provided but only if it is considered significant for the assessment. As a general principle, the Commission will, where required, make a rough assumption on the split based on geographic location of the exceedance.

² Give page reference(s) to from where this information is derived in the notification supporting documents, e.g. air quality plan.

Notes on the Form 3A

Sub a: This corresponds to the code number(s) of the exceedance situation on Form 2a. If more than once exceedance situation is described, delimit their codes with semicolon.

Sub b, c, d and e: The background level is the concentration of pollutants on a larger scale than the exceedance area. The regional background level is the level that is estimated to occur in the absence of sources within a distance of the order of 30 km. For locations in a city, this would be the background level in the absence of the city. For exceedance due to long-range transport of air pollution, the regional background can be equal to the exceedance reported in Form 2. The total (urban) background increment is the concentration level in addition to regional background that is estimated to occur in the absence of local sources (with high chimneys within about 5 km and low sources within roughly 0.3 km – this distance could be smaller, e.g. for residential heating, or larger, e.g. for steel mills). The total background level increment excludes the regional background level. Local increment identifies contributions from sources in the immediate vicinity.

Sub b, c, d and e:

Indicate a percentage contribution of each of the spatial contributions regional/urban/local and sub sectors. The total contribution presented in the 'Total' boxes for regional background, urban background increment and local increment must sum up roughly to 100 %. The percentage contribution of each of the sub sectors must roughly sum up to the percentage contribution of the total for the contribution at that spatial scale. Please note that the source apportionment for the short term limit value must be for the exceedance days only. This means that if an annual mean equivalent method has been used to calculate the number of exceedance days, the source apportionment must still focus on the exceedance days only. If that is not the case this should be clearly identified in comments and reflection on the potential difference provided.

Provide an estimate of the uncertainty in the format of source apportionment \pm uncertainty (in percentages e.g. 20% \pm 5%).

Contributions below 3% may be labelled as "NS" (not significant).

If certain contribution is significant but has been included in other sector, this should be labelled "I" (included) and further information provided in the Sub-g.

Give a page reference to the method used to calculate the source apportionment.

Sub b, d and e: Where the 'other' category is used, give details of what this is in Form 3A.

Sub b: Split of total only to be provided for PM10 exceedance situations.

Sub c: Only to be provided for NO2 and benzene exceedance situations.

Sub d and e: To be provided for all exceedance situations. The split is important as it enables assessment of impact of Community measures and the impact of specific national/regional measures (e.g. on off-road machinery)

Sub e: Provide page references to the description of the emissions data used in the air quality plan. This reference should include details of emissions estimates in tonnes/yr from local sources (e.g. a nearby industrial plant, the emissions per unit length of a nearby road).

Sub f: Include a page reference to methodology used to calculate the source apportionment presented in Form 3A. This methodology should include a description of how the uncertainty has been estimated.

General note:

Where the exceedance situation covers a distinct geographical area (as opposed to a point exceedance at a monitoring site) the source apportionment in the exceedance area at the location of highest measured or modelled concentration should be given in Form 3A. Deviation from this rule must be explicitly referenced and potential implications of the deviation explained.

Extra local and urban background source apportionment categories of shipping and off road mobile machinery have been added to the Form 3A compared to the original categories in 2004/224/EC Form 3. This is because Member States and the Community as a whole may employ specific types of measures to address these categories so the impact of these measures will need to be assessed separately in the time extensions notification process.

The source apportionment categories are defined in Table 7.1 below.

Table 1: Definitions of what is included in each source category.

Source	Definition of source
Traffic	Road traffic emissions only (excludes emissions from off road mobile machinery)
Industry including heat and power production	Emissions arising directly from industrial processes and combustion (e.g. sinter plants, BOS furnaces). This excludes emissions from off road mobile machinery used in industry. Because industry is such a broad category, a page reference to where the relevant information about the relative contribution of different processes can be found in the full air quality plan should be given.
Agriculture	Emissions arising directly from agricultural activities (e.g. chicken farming). This excludes emissions from off road mobile machinery used in agriculture.
Commercial and residential	Emissions from commercial or residential heating (e.g. domestic boilers). This excludes emissions from off road mobile machinery used in commercial and residential sectors.
Ships	Emissions from shipping (excludes emissions from off road mobile machinery used at ports).
Off road mobile machinery	This includes off road mobile machinery used in industry, agriculture, commercial and residential sectors and shipping.
Natural	Sources which are not influenced by human activity*1.
Other	

¹ For the purpose of this source apportionment, only those sources with natural origin which are strictly independent of human activity can be listed under "natural". E.g., dust resuspended from roads, even if having Saharan origin, must be listed under "traffic"; wind-blown dust from crop fields must be listed under "agriculture".

2.7. Form 3B: Reflection on the failure to deliver compliance by the original deadline

Form 3B is required to support the claim that all appropriate measures have been taken to achieve the original deadline (2005 for PM_{10}). In order to substantiate this claim, evidence must be given relating to for which sources the measures (additional or baseline) had delivered differently than expected, resulting in the exceedance in the year 2005.

This Form can be used to describe several exceedance situations, if appropriate. Where that is done, it is understood that no specific local measure has been taken to achieve compliance by the original deadline.

Only significant source contributions (>3%) need to be analysed. It is important to note that while the exceedance situation code might be referring to a reference year which is not the original attainment date, the reflection has to be provided for the original attainment date in accordance with Article 22 of the Directive.

It is assumed that the efforts by the Member States were geared towards compliance by the original deadline. If, for example, the annual average of PM_{10} at the attainment date (2005) was above the limit value, this may be attributed to various reasons following the ex-post analysis, among others:

- transboundary air pollution in 2005 was higher than it was expected when the original air quality plan³ was prepared;
- the effect of measures according to existing legislation (baseline) was smaller than it was expected when the original air quality plan was prepared;
- the effect of measures from the air quality plan was smaller than expected.

Just identifying contributing sources is not enough. A summary explanation of causes and effects is necessry already within the Form, while a more comprehensive analysis can be referenced. I.e. the principal quantitative indicators can be effectively presented using Form 5A and the Annex to Form 5A and Annex A to Form 7.

If a notification is submitted for NO_2 before 2010, the same assessment applies to the <u>projected gap</u> between estimated levels of NO_2 in 2010 (baseline + all measures under Form 5A) and the limit value.

The reflection is represented by a single number that states in relative terms (%) how much of the exceedance in 2005 can be attributed to the lack of estimated reduction of the particular source contribution.

EN EN

[&]quot;Air quality plan" corresponds to "plan or programme" according to the Air Quality Framework Directive.

F	orm 3B: Reflection on the failure to deliver compliance by the riginal deadline	Columns fille Contribu- tion to exceedance ²	Measures	
a.	Code(s) of exceedance situation			
b.	Estimate of split for regional background PM10			
	Total*1			
	From within Member State*1			
	Transboundary*1			
	Natural*1			
	Other (please specify)*1			
c.	Estimate of split for regional background NOX / benzene			
	Total*1			
	From within Member State*1			
	Transboundary*1			
d.	Estimate of split for urban background PM10 / NOX / benzene increment			
	Total*1			
	Traffic*1			
	Industry including heat and power production*1			
	Agriculture*1			
	Commercial and residential*1			
	Shipping*1			
	Off road mobile machinery*1			
	Natural*1			
	Transboundary urban background (please specify the source)*1			
	Other (please specify)*1			
e.	Estimate of split for local PM10 component / NOx / benzene increment			
	Total*1			
	Traffic*1			
	Industry including heat and power production*1			
	Agriculture*1			
	Commercial and residential*1			
	Shipping*1			
	Off road mobile machinery*1			
	Natural*1			
	Transboundary local (please specify the source)*1			
	Other (please specify)*1			
f.	Comments for clarification			

For each exceedance situation, three columns have to be filled in:

- 1 Give page reference(s) to from where this information is derived in the notification supporting documents, e.g. air quality plan.
- 2 The relative contribution (in %) by the source to the difference between limit value and actual concentrations at the original attainment date. When positive, all measures on the source had 'underachieved', if negative, contribution to improvement is larger than expected. In total, the contributions under b, c, d, e should roughly equal 100%. There is no specific methodology prescribed for the quantification, or modelling required. If only expert estimation of causes is considered an adequate reflection by the Member state, such information should be provided rather than indicate 'UNAVAILABLE'. The same applies for uncertainty of quantification. A reference to the methodology is to be provided.

Example PM_{10} : Form 3B describes measured annual PM_{10} concentration of 52 µg/m³, annual LV is 40 µg/m³. Difference (52-40)µg/m³ = 12 µg/m³ equals 100%. If traffic related measures have contributed by approximately 3 µg/m³ less reduction in urban background increment and 4 µg/m³ less locally than expected, the contributions would be 25 and 33 % respectively. If, for example, the reduction in the industrial sector has been according to expectations the contribution is 0. Uncertainty is estimated at 20%.

Example NO_2 : NO_2 annual average baseline of Form 4A, subtracting sum of impacts of measures in implementation by 2010. Form 5A describes the estimated concentration in 2010 NO2 concentration of 48 μ g/m³ = (52 - 2 - 1 - 1) μ g/m³, annual LV is 40 μ g/m³. The "gap" in NO2 concentration is (48-40) μ g/m³ = 8 μ g/m³. This gap must then be explained by a deviation in the NOx source apportionment. For the relationship between NO2 and NOx, the same assumptions can be made as in the Annex to Form 5A. For example, if the relationship between NO2 and NOx shows that a NO2 reduction of 8 μ g/m³ corresponds to a NOx reduction of 12 μ g/m³, the deviation in the NOx source apportionment is 12 μ g/m³; this is then split (in %) across sectors as appropriate and justified.

- 3 Identify measure(s) related to the particular source. Through the form, all measures taken to comply with the original deadline must be presented with their respective codes. Measure may appear in several rows as it might have, for example, urban background and local impact. Insert 'BL' if the deviation can be explained by a deviation in the baseline over time. If the deviation can also be explained by one or several measures showing a larger or smaller effect than expected, enter the code(s) of this/these measure(s). Codes of the measures are those described in Form 7 and (optionally for PM10) entered in Form 5A.
- 4 Justification: Describe which effect of existing legislation was larger/smaller than expected, or why a certain measure showed a larger/smaller effect than expected covering the measures identified in the previous column. Note that the measure could actually still be quite effective. In the above example, the local traffic reduction was perhaps projected to be $20~\mu g/m^3$, Justification is expected to demonstrate the reasons behind the (possibly overambitious) prediction and/or difficulties in implementation, as appropriate. The level of detail of the justification should be in proportion to the contribution to the total deviation, and may include, where appropriate, references to external documents such as the plan, reports etc. The description of financial efforts and emission reduction can be effectively presented through the Form 5A, where also the impact of measures taken on the concentration levels at different spatial scales can be presented.

Notes on the Form 3B

The notes on the Form 3A apply.

2.8. Form 4A and 4B: Baseline level

Forms 4A and 4B are required in the assessment process to provide the following information

- Essential information from the air quality plan
- Form 4A: The estimated baseline levels for the original deadline for compliance with the limit values:
 - Form 4A Baseline for 2005 for PM₁₀ is not needed for the assessment as all essential information is contained in Form 3A and Form 3B. The same applies to the baseline for 2010 for NO2 if a notification is submitted after 1 January 2010.
 - If a time extension application for NO₂ is made early (i.e. already in 2008), the Form 4A baseline for 2010 is required and the data from this Form should be used to fill in Form 3B. Due to proximity between 2008 and 2010 a robust estimate may perhaps be provided already through simple linear interpolation.
 - To prevent double counting the baseline must not include any measures identified explicitly in Form 5A as a measure to achieve the initial deadline
- Form 4B: The estimated baseline levels for the extended deadline for compliance with the limit values:
 - This information must be provided for all pollutants. The estimated baseline levels for the <u>extended deadline</u> for compliance with the limit values (June 2011 for PM₁₀ and 2015 for NO₂ and benzene). This information is required to show the magnitude of the gap between the limit value and the level expected at the end of the extended deadline, which has to be closed by additional measures.
 - To prevent double counting, this baseline must include all measures identified explicitly in Form 5A as measures to achieve the initial deadline. If a measure has been significantly upgraded or changed scope, then the measure must not be included in the baseline but presented as a new separate measure also listed in Form 5B.

Forms 4A and 4B are identical in structure and information to the original Form 4 contained in Decision 2004/224/EC. They differ only in the reference year to which they apply. Note that, because of that, the information is provided as concentration levels or exceedances rather than percentages as in the source apportionment Form 3A, and through total contribution to the level at the specific scale (i.e. urban background, at location of exceedance) rather than as increment.

As consistently applied throughout the Forms, either NO_2 or NO_x concentration levels can be provided in case of the exceedance of nitrogen dioxide. Use of NO_x is encouraged. If NO_x levels are used, clarification should be provided under Sub-e that indicates that NO_x levels are presented and, to the extent appropriate, the local primary NO_2 level used in the estimate of baseline levels.

Fo	Form 4A: Baseline level for original deadline for compliance		
a.	Code number of the exceedance situation		
b.	Short description of the emission scenario used for the baseline analysis:		
	Sources contributing to the regional background level *1		
	Regional sources contributing to the total background level but not to the regional background level *1		
	Local sources as far as relevant *1		
c.	Expected levels in the first year in which the limit value has to be met:		
	Regional background baseline level:		
	Annual mean concentration in μg/m ³ if applicable, or *1		
	Maximum 8 hour mean CO concentration in mg/m3, or *2		
	Total number of exceedances expressed in relation to the LV if applicable *1		
	Total background baseline level:		
	Annual mean concentration in μg/m ³ if applicable, or *1		
	Maximum 8 hour mean CO concentration in mg/m3, or *2		
	Total number of exceedances expressed in relation to the LV if applicable *1		
	Baseline level at location of exceedance:		
	Annual mean concentration in μg/m ³ if applicable, or *1		
	Maximum 8 hour mean CO concentration in mg/m3, or *2		
	Total number of exceedances expressed in relation to the LV if applicable *1		
d.	Were any measures beyond those resulting from existing legislation needed to ensure that the limit value would be met by the original compliance date? $[y/n] *1$		
e.	Comments for clarification if needed		

¹ Give page reference(s) to from where this information is derived in the notification supporting documents, e.g. air quality plan.

Note to Form 4A

Sub e. To be completed for NO2 exceedances only: Indicate whether NO2 or NOx levels are presented in the Form, and provide the local primary NO2 level used in estimating baseline levels for the original deadline for compliance.

² Not to be filled in because CO is not a pollutant covered in the time extensions assessment

Fo	Form 4B Baseline level for extended deadline for compliance		
a.	Code number of the exceedance situation		
b.	Short description of the emission scenario used for the baseline analysis:		
	Sources contributing to the regional background level *1		
	Regional sources contributing to the total background level but not to the regional background level *1		
	Local sources as far as relevant *1		
C.	Expected levels in the year of the extended deadline.		
	Regional background baseline level:		
	Annual mean concentration in μg/m3 if applicable, or *1		
	Maximum 8-hour mean CO concentration in mg/ m3 if applicable, or*2		
	Total number of exceedances expressed in relation to the LV if applicable *1		
	Total background baseline level:		
	Annual mean concentration in μg/m3 if applicable, or *1		
	Maximum 8-hour mean CO concentration in mg/m3 if applicable, or*2		
	Total number of exceedances expressed in relation to the LV if applicable *1		
	Baseline level at location of exceedance:		
	Annual mean concentration in µg/m3 if applicable, or *1		
	Maximum 8-hour mean CO concentration in mg/m3 if applicable, or*1		
	Total number of exceedances expressed in relation to the LV if applicable *1		
d.	Are any measures beyond those resulting from existing legislation needed to ensure that the limit value will be met by the extended compliance date? $[y/n] *1$		
e.	Comments for clarification if needed		

¹ Give page reference(s) to from where this information is derived in the notification supporting documents, e.g. air quality plan.

Note to Form 4B

Sub e. To be completed for NO2 exceedances only: Indicate whether NO2 or NOx levels are presented in the Form, and provide the local primary NO2 level used in estimating baseline levels for the extended deadline for compliance.

² Not to be filled in because CO is not a pollutant covered in the time extensions assessment

2.9. Forms 5A and 5B: Details of measures beyond those already required by existing legislation

These Forms are required in the assessment process to provide the following information:

- Essential information from the air quality plan
- Measures that have been or will be implemented by Member States to comply with the limit values

Form 5A provides details of **all** measures which have been or will be implemented before the **original** deadline for compliance (2005 for PM_{10} , 2010 for NO_2 and benzene). This information will be used to check whether for PM_{10} all appropriate measures have been taken to meet the original deadline for compliance, and to support the claim that limit values for NO_2 /benzene cannot be achieved by 1 January 2010.

If the Member State is of the opinion that Form 3B is already adequately presenting the effort of achieving compliance by the original deadline, Form 5A and the associated Annex to Form 5A do not need to be used.

Form 5B shall provide details of **all** measures which have been or will be implemented before the expiry of the postponement or exemption period. This will be used to check whether the combination of measures proposed will be sufficient to meet the limit values by the extended deadlines.

Forms 5A and 5B are identical in structure and information to the original Form 5 contained in Decision 2004/224/EC; they differ only in the reference year to which they apply, i.e. the year for which the impacts of measures are presented.

For	Form 5A: Details of measures implemented before the original date of compliance		
a.	Code number of the exceedance situation		
b.	Code(s) of the measure(s)		
c.	Planned timetable of implementation *1		
d.	Indicator(s) for monitoring the progress*1		
e.	Funding allocated (years; amount in EURO) *1		
f.	Estimated total costs (amount in EURO) *1		
g.	Estimated level in the years when the limit value had/will have to be met (original deadline), taking the additional measures into account*1		
h.	Comments for clarification if needed		

¹ Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

Notes on Form 5A

If no additional measures are/were taken at the exceedance situation in order to comply with the original deadline the column will be empty. In such case, clarification has to be provided under Sub h.

Sub b: Each measure must be indicated by a code, which refers to a measure described in Form 7. This cell is an explicit declaration/list of all measures taken in order to comply with the original deadline. The codes are all expected to appear in the second column under Form 3B at the appropriate sectoral placeholders.

Sub c: Keywords on the various implementation steps must be given followed by a date or period in the form "mm/yy". Entries must be separated by a semicolon.

Sub e and f: The funding allocated refers to public funds alone; the estimated total costs include also the costs borne by the sector(s) affected. For PM_{10} this information should be related to funds/costs before and in 2005 borne to comply with the original deadline.

Sub g: This information must be coherent with the Form 3B that analyses the failure to reach the limit value by the original deadline.

For	Form 5B: Details of measures to be implemented before the extended date of compliance		
a.	Code number of the exceedance situation		
b.	Code(s) of the measure(s)		
C.	Planned timetable of implementation *1		
d.	Indicator(s) for monitoring the progress *1		
e.	Funding allocated (years; amount in EURO) *1		
f.	Estimated total costs (amount in EURO) *1		
g.	Estimated level in the years when the limit value has to be met (extended deadline) , taking the additional measures into account *1		
h.	Comments for clarification if needed		

² Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

Notes on Form 5B

Form 5B is to be completed only if the analysis required by Form 4B shows that it is not expected that the limit values will be attained at the end of the extended deadline by measures already required by existing legislation – these include all measures to achieve compliance by the initial deadline as listed in Form 5A. As the extended deadline for NO2/benzene is at maximum 2015 (shorter if possible), it is expected that appropriate additional measures beyond existing legislation bundled in baseline Form 4B are presented.

Sub b: Each measure must be indicated by a code, which refers to a measure or a measure bundle described in Form 7.

Sub c: Keywords on the various implementation steps must be given followed by a date or period in the form "mm/yy". Entries must be separated by a semicolon.

Sub e and f: The funding allocated refers to public funds alone; the estimated total costs include also the costs borne by the sector(s) affected. This cell is an explicit declaration/list of all additional measures taken in order to comply with the extended deadline. Measures already taken to achieve compliance by the original deadline are already listed under Form 5A, and their impact at the extended deadline bundled within baseline Form 4B.

2.10. Annexes to Forms 5A and 5B: The total impact of all measures on the exceedance situation

The information provided in these Forms is required to demonstrate how the combined impact of the measures presented in Forms 5A and 5B will enable compliance with the limit values to be achieved by the deadline for compliance.

The Annex to Form 5A complements Form 3B in demonstrating the efforts to achieve compliance by the original deadline, i.e. that all appropriate measures were taken. If the Member State is of the opinion that Form 3B is already adequately presenting the effort of achieving compliance by the original deadline, Form 5A and the associated Annex to Form 5A do not need to be used.

sit	Annex to Form 5A: The total impact of all measures on the exceedance situation in the year of the original deadline for compliance with the limit value			
a.	Code of exceedance situation			
b.	Total emissions in the relevant spatial unit*1 without measures listed (PM10 / NOx / benzene)*2			
c.	Total emission reduction in the relevant spatial unit*1 of the measures combined (PM10 / NOx / benzene)*2			
d.	Total impact of the measures combined on PM10 / NOx / benzene			
	Regional background*2			
	Urban background*2			
	Local*2			
e.	Impact of measures on NO2*2			
f.	Assumptions made regarding primary NO2 levels and regional oxidant levels (where relevant)*2			
g.	Comments for clarification			

¹ Local, zone or agglomeration, regional, national; see also notes to Form 7

Notes on the Annex to Form 5A

Sub a: This should correspond to the code number of the exceedance situation in Form 2 sub a.

Sub b, c: emissions for the reference year of the original deadline (2005 for PM_{10} , 2010 for NO_x /benzene).

Sub d and e: For annual mean metrics this reduction should be presented in $\mu g/m^3$ at the monitoring site where the highest levels are recorded. Where there is an exceedance situation without a monitoring site, the point of highest modelled concentrations should be used. Deviation from this rule has to be indicated and explained.

Sub d and e: For short-term limit values this should be presented as the expected reduction in number of exceedances.

Sub f: Regional oxidant should be provided in ppb. Primary NO_2 emissions should be expressed as a percentage of local NO_X emissions by volume (which is the same as the mass of NO_2 as a percentage of the mass of NO_X , with NO_X expressed as NO_2)

² Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

Annex to Form 5B: The total impact of all measures on the exceedance situation in the year of the extended deadline for compliance with the limit value		
a.	Code of exceedance situation	
b.	Total emissions in the relevant spatial unit *1 without measures listed $(PM10/NOx/benzene)$	
c.	Total emission reduction in the relevant spatial unit *1 of the measures combined (PM10 / NOx / benzene)	
d	Total impact of the measures combined on PM10 / NOx / benzene	
	Regional background *2	
	Urban background *2	
	Local *2	
e.	Impact of measures on NO2 *2	
f.	Assumptions made regarding primary NO2 levels and regional oxidant levels (where relevant) *2	
g.	Comments for clarification	

¹ Local, zone or agglomeration, regional, national; see also notes to Form 7

Notes on the Annex to Form 5B

Sub a: This should correspond to the code number of the exceedance situation on Form 2 sub a.

Sub b, c: emissions for the reference year of the extended deadline.

Sub c: emission reductions should refer only to measures listed under Annex B to Form 7; the impact of measures listed under Annex A to Form 7 should be included under baseline.

Sub d and e: For annual mean metrics this reduction should be presented in $\mu g/m^3$ at the monitoring site where the highest levels are recorded. Where there is an exceedance situation without a monitoring site, the point of highest modelled concentrations should be used. Deviation from this rule has to be indicated and explained.

Sub d and e: For short-term limit values this should be presented as the expected reduction in number of exceedences.

Sub f: Regional oxidant should be provided in ppb. Primary NO_2 emissions should be expressed as a percentage of local NO_X emissions by volume (which is the same as the mass of NO_2 as a percentage of the mass of NO_X , with NO_X expressed as NO_2).

² Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

2.11. Form 6: Evidence that all measures have been considered

Form 6 is required in the assessment process to provide information on whether all appropriate measures have been considered for the attainment of compliance by the new deadline. It allows Member States to provide a justification if certain types of measures listed in Annex XV B (3) of the Air Quality Directive are not or will not be implemented.

This form replaces Form 6 of Decision 2004/224/EC, which was an optional form for measures that have not yet been taken and long-term measures.

F	Form 6: Evidence that appropriate measures have been considered							
a.	Code of exceedance situation							
b.	Emission control equipment for small and medium sized stationary combustion sources / replacement of combustion sources							
c.	Retrofitting emission control equipment to vehicles							
d.	Public procurement							
	New vehicles, including low emission vehicles							
	Cleaner vehicle transport services							
	Low emission stationary combustion sources							
	Low emission fuels for stationary and mobile sources							
e.	Traffic planning and management							
	Low emission zones							
	Congestion pricing zones							
	Differentation of parking fees							
	Management of parking places							
	Effective reduction of speed limits and control							
	Slow modes (e.g. expansion of bicycle and pedestrian infrastructure)							
	Freight transport							
	Effective improvement of public transport							
	Land use planning to ensure sustainable transport facilities							
	Other							
f.	Encouragement of shift of transport modes							
g.	Low emission fuels for small, medium and large scale stationary sources and in mobile sources							
	Regulations for fuel quality	-						

Shift to installations using low emission fuels	
Other	
Measures to reduce pollution through permit systems and economic instruments	
LCP permits and national plans going beyond BAT	
IPPC permits beyond BAT	

	Introduction/increase of environment taxes	
	Introduction/increase of environment charges	
	Tradeable permit system	
	Introduction/increase of environmental funding	
	Other	
i.	Measures to protect children or other sensitive groups	
j.	Other	
k.	Comments for clarification	

Notes on Form 6

Sub b to i: For each exceedance situation, either the code(s) of the corresponding measure(s) from Forms 5A and 5B must be given or a justification of why no measure of this type has been implemented for that exceedance situation. It is sufficient to provide a justification for each empty section heading in sub b to i, i.e. for the subsections justifications only have to be given to the extent appropriate, however, with particular attention given to those measures explicitly mentioned in Annex XV B. Placeholders 'other' are provided to appropriately structure the evidence of measures or justification.

Where available, information can be added on measures of a certain type that have been considered but not taken, even if a single measure of the type already exists.

Sub h: See also green paper on market-based instruments for environment and related policy purposes (COM(2007) 140 final) and Commission staff working document accompanying the green paper on market-based instruments for environment and related policy purposes (SEC(2007) 388)

Sub j: List codes of remaining measures from Forms 5A or 5B which are not listed under subs b to i. If all measures from Forms 5A or 5B are listed under subs b to i, leave sub j empty.

2.12. Form 7: Summary of measures

Form 7 is required for the assessment process to provide the following information:

- Essential information from the air quality plan
- Essential descriptive information on individual measures taken or planned to be taken in each exceedance area.

A bundle of related individual measures such as a national abatement approach to a certain source or source sector, or all measures improving bike/pedestrian infrastructure in a city, can be presented as a single measure.

Fo	Form 7: Summary of measures						
a.	Code of the measure						
b.	Title						
C.	Description *1						
d.	Administrative level at which the measure could be taken *1						
e.	Type of measure *1						
f.	Is the measure regulatory? [y/n] *1						
g.	Time scale of reduction *1						
h.	Source sector(s) affected *1						
i.	Spatial scale of the sources affected *1						
k.	Comments for clarification if needed						

Notes on Form 7

Form 7 is to be used to describe the measures mentioned in Forms 5A and 5B. One column of Form 7 must be completed for each measure.

Sub a: Each measure (or measure bundle) must be given a unique code.

Sub c: The description of the measure is a free text of typically 100 to 200 words.

Sub d: The following codes must be used to characterise the administrative level at which the measure could be taken: A: local; B: regional; C: national.

Sub e: The following codes must be used to characterise the type of measure: A: economic/fiscal; B: technical; C: education/information; D: other.

¹ Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

Sub g: The following codes must be used to characterise the time scale of the concentration reduction achieved by the measure: A.: short term; B: medium term (about a year); C: long term.

Sub h: The following codes must be used to characterise the source sector affected by the measure: A: transport; B: industry including heat and power production; C: agriculture; D: commercial and residential sources; E: other.

Sub e and h: If the code for "other" is used, it must be clarified at the entry "Comments for clarification".

Sub i: The spatial scale of the sources affected should be related to the zone for which the application is sought. Hence a differentiation in local, agglomeration, zone and national is suggested.

Sub d-i: If more than one code applies, they must be separated by a semicolon.

2.13. Annexes A and B to Form 7: The impact of individual measures on the exceedance situation

Annexes A and B to Form 7 summarise information on the impacts of separate measures in each exceedance situation per spatial scale. This information is necessary to assess whether the estimated impact of each measure is realistic and sufficient to meet the limit value by the extended deadline.

Annex A to Form 7 documents the impact of measures in the year of the **original deadline** for compliance (2005 for PM₁₀; 2010 for NO₂ and benzene). For the purpose of the assessment, it is expected to be coherent in particular with Form 3B.

Annex A to Form 7 is optional for PM_{10} as the essential information and references to measures may be adequately provided in Form 3B. It can however be considered as an effective instrument to present the principal information on the measures taken in order to present the efforts already in place.

<u>For NO2/benzene Annex A to Form 7 is necessary</u> as it provides precise information on the timing of the measure to achieve compliance by 2010.

Annex B to Form 7 documents the impact of measures in the year of the **extended deadline**. It is important as it brings specific information on the timing of the measure, required to assess the postponement time requested.

Both forms are identical in structure and information and only differ in the reference year to which the information applies. When the reference year is in the past (Annex A to Form 7 for PM_{10}) it is expected that the impact is an ex-post analysis, while for the future (Annex A to Form 7 for NO2/benzene, Annex B to Form 7 for all) the impact on different scales is a projection. The projection methodology is for the Member State to determine. For example, when a comprehensive assessment has been performed for the impact of a PM_{10} measure in 2010, the Member State may find in specific cases that it is appropriate to apply a simple interpolation into 2011.

In instances where a measure to comply with the initial deadline has been significantly upgraded or changed in scope, the measure is required to be considered as a new measure and its impacts need to be included in Annex B to Form 7, Form 5B (when aggregating) and not aggregated under Form 4B (baseline). In the description of the measure, its reference to the existing measure listed under Form 5A must be given. Thereby, impacts of measures will be adequately taken into account without double counting.

The impact of related measures (e.g. all improvement of public transport in the city) can be bundled together within a single description of the impact. While the bundle can already be identified as a single measure in Form 7, it can also be bundled ad-hoc in the Annex itself by separating codes of measures under Sub-b.

Ar	Annex A to Form 7: The impact of individual measures on the exceedance						
	situation in the year of the original deadline for compliance						
a.	Code of exceedance situation						
b.	Code(s) of measure(s)						
c.	Time table for implementation of the measure						
	Implementation date *1						
	Date when the measure takes full effect *1						
	Other key dates for the measure *1						
d.	Reduction in PM10 / NOx / benzene emissions relative to the baseline						
e.	Local impact on primary NO2 emissions fraction f-NO2 *1						
f.	Expected impact on ambient PM10 / NOx / benzene concentrations						
	Regional impact *1						
	Impact on urban background *1						
	Local impact *1						
g.	Local impact on ambient NO2 concentrations if the measure is focussed on the primary NO2 emissions fraction *1						
h.	Comments for clarification						
doc me	tive page reference(s) to from where this information is derived in the notification uments e.g. air quality plan. Annex B to Form 7: The impact of in easures on the exceedance situation in the year of the extended deampliance	ndividual					
a.	Code of exceedance situation						
b.	Code(s) of measure(s)						
c.	Time table for implementation of the measure						
	Implementation date *1						
	Date when the measure takes full effect *1						
	Other key dates for the measure *1						
d.	Reduction in PM10 / NOx / benzene emissions relative to the baseline						
e.	Local impact on primary NO2 emissions fraction f-NO2 *1						
f.	Expected impact on ambient PM10 / NOx / benzene concentrations						
	Regional impact *1						
1	Impact on urban background*1						
L	Impact on urban background*1 Local impact *1						
g.							

¹ Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan.

Notes on the Annexes A and B to Form 7

Where there are several measures for a given exceedance situation, each measure must be entered in a separate column in this form.

Sub a: This must correspond to the code number of the exceedance situation on Form 2 sub a.

Sub c: For the box labelled other key dates for the measure, provide information in the format: First key date (short description of why this date is significant); second key date (short description of why this date is significant) etc.

Point d: The total emissions reduction at each scale is given in ktonnes/yr. The original total must also be given in brackets to give an indication of the percentage reduction in emissions associated with each measure.

Sub e and g: For NO2 limit values only. If there is an expected change then the new primary NO2 level caused by the measure must be given. If no change is expected from the base line level given in Form 4B, this must be stated in this box.

Sub f and g. For annual mean metrics this reduction should be presented in $\mu g/m^3$ at the monitoring site where the highest levels are recorded. Where there is an exceedance situation without a monitoring site, the point of highest modelled concentrations should be used. Deviation from this rule has to be indicated and explained in Sub h.

Sub f and g. For short term limit values this must be presented as the expected reduction in the number of exceedances.

2.14. Form 8: Demonstration that other directives have been implemented by the Member State

Form 8 is required in the assessment process to provide information on the implementation of other Directives related to air quality as provided for in Annex XV Section B (2) to the Directive. Directive 2001/81/EC on national emissions ceilings is an important tool for emissions control at national level, and measures taken under that Directive are consequential for achieving compliance with the limit values for PM10, NO2 and benzene in zones and agglomerations. Specific information on the implementation of that Directive is therefore requested. This Form will allow Member States to provide more up-to-date and relevant information than that which may already be available to the Commission.

Fo	Form 8: Demonstration that other directives have been implemented by the Member State														
		70/220/EEC emissions from motor vehicles	94/63/EC VOC emissions	96/61/EC IPPC	97/68/EC non-road mobile machinery	98/70/EC quality of petrol and diesel fuels	1999/13/EC organic solvents	1999/32/EC reduction in the sulphur content	2000/76/EC incineration of waste	2001/80/EC LCP	2001/81/EC NEC	2004/42/EC VOC emissions organic solvents	2005/33/EC sulphur content of marine fuels	2005/55/EC emission of vehicles	2006/32/EC energy efficiency
a.	Date of notification														
b.	Reference to national legislation														
c.	Infringement procedure (y/n)														
d.	Is there a derogation (y/n or N/A)														

e.	Information related to the NEC Directive
	Date of submission of programmes (which were due on 31. December 2002) (Art. 8 2)
	Date of submission of updated programmes (which were due on 31 December 2006) (Art. 8 2)
	Reference to programme and updated programme
	NOx: National emission ceiling for 2010 in kt
	NOx: Projections for national emissions in 2010 in kt
	SO2: National emission ceiling for 2010 in kt
	SO2: Projections for national emissions in 2010 in kt
	VOC: National emission ceiling for 2010 in kt
	VOC: Projections for national emissions in 2010 in kt
	NH3: National emission ceiling for 2010 in kt
	NH3: Projections for national emissions in 2010 in kt
	If applicable, list additional measures which were not included in the updated NEC programmes, but which were implemented in the meantime
	Enter reference to energy and traffic projection used in the NEC programmes
f.	Information related to the Energy Efficiency Directive
	Date of submission of EEAP (Art. 14 (2))
	Reference to EEAP

Note on Form 8

One form to be filled in which covers all exceedance situations in one Member State.

2.15. Annex to Form 8: Information on directives which are not completely implemented

The information in the Annex to Form 8 is only required for those Directives concerned by infringement procedures, derogations, or where implementation is otherwise incomplete.

A	Annex to Form 8 – Information on directives which are not completely implemented						
a.	Code of exceedance situation						
b.	Rating of the importance of incomplete implementation for the specific exceedance situation						
c.	Justification for the rating of importance						

Notes on the Annex to Form 8

One column has to be filled in for each exceedance situation

Sub a. This should correspond to the code number of the exceedance situation in Form 2a.

Sub b. Use the following rating of importance: 0: no effect, 1: small effect, 2: medium effect, 3: large effect.

The rating has to be specific to the exceedance situation.

2.16. Form 9: Additional information on relevant Directives

The information in Form 9 provides additional detail on the status of implementation of those Directives listed in Form 8 that have an impact on air quality which differs from exceedance situation to exceedance situation.

The information on individual installations in the zone or agglomeration concerned need to be provided only for the most significant individual installations which jointly contribute significantly (> 3%) to the exceedance situation. Alternatively, the significance criterion of 3% can be applied more simply in respect of the total emissions in the zone.

Fo	orm 9: Additional information on relevant directives
a.	Code of exceedance situation
b.	Information related to AQ Directives
	Date of first adoption of plan or programme that includes measures related to the pollutant in question
	Date of first adoption of short term action plan that includes measures related to the pollutant in question
	Link to short term action plan
c.	Information related to the IPPC Directive
	List installations under the IPPC regime which contribute to the exceedance, including installation ID from the EPER (or PRTR) database.
	Do all installations have permits in compliance with BAT? y/n
	Do the permit conditions include emission limit values ensuring that emission levels are achieved which are within the BAT ranges as set out in the relevant BAT reference documents (BREFS)? y/n
	List the installations with permit conditions allowing higher emissions than BAT levels set out in the BREFs and indicate what are the differences in waste gas concentrations (mg/Nm³) and overall emissions (t/year) between the current emissions of the installation and those BAT levels
	Are permits periodically updated? y/n
	List the installations with stricter permit conditions than BAT according to Art. 10 IPPC-Directive
d.	Information related to the LCP Directive
	List installations under the LCP regime which contribute to the exceedance
	List installations which comply with emission limit values given in the LCP Directive
	If an LCP national emission reduction plan (NERP) has been established, list the installations covered
e.	Information related to the Waste Incineration Directive
	List installations under the waste incineration Directive which contribute to the exceedance
	List installations which comply with emission limit values given in the waste incineration Directive
f.	Comments for clarification

Notes on Form 9

Fill in one column for each exceedance situation.

Sub a: This should correspond to the code number of the exceedance situation on Form 2 sub a.

Sub b: The entries in these boxes are identical for all exceedance situations within one zone or agglomeration. A link to the short term action plan has to be provided through weblink, and if not accessible over internet, by reference to an attached document.

Sub f: The clarification may include information on how the significance criterion has been applied or more details on the specific points under question above, for example, how permitting updates are performed etc. Reference to parts of external documents may be provided.

2.17. Form 10: Reasons for non-compliance for PM₁₀

Form 10 provides essential information needed for the assessment of claims that exceedances of the limit value(s) for PM_{10} are due to one or more of the following elements: site-specific dispersion characteristics, adverse climatic conditions, or transboundary contributions.

Further details of this condition are provided in the Communication. For the most basic justification of the condition, data may be provided under subs b, d, or f.

Alternatively, a justification can be provided through more elaborate means and other indicators, referenced under subs c, e, or g. The condition is linked to the exceedance situation. If a zone has several exceedance situations, the justification is needed for each, and they may in principle differ even within the same zone.

a.	Code of exceedance situation
b.	Information related to site-specific dispersion conditions:
	Street length (m)*1
	Average width of street (m)*1
	Average height of buildings (m)*1
	Evidence that the exceedance is restricted to the street geometry*1
	Comments for clarification if needed
г.	Reference to document which explains in detail why the exceedance is due to site-specific dispersion characteristics
d.	Adverse climatic conditions:
	Average wind speed (m/s)*1 or other indicator of adverse climate conditions
	Location and averaging period used for the average wind speed*1 or other indicator
	List of measured PM10 concentrations and average wind speeds for all days with PM10 concentrations $> 50 \mu \text{g/m}^3$, starting in 2005 *2, or corresponding correlation with other indicator*1
	Comments for clarification if needed (necessary if other indicator than average wind is used)

Continued on next page

f.	Transboundary pollution:	
	For exceedances of the annual limit value: Transboundary contribution ($\mu g/m^3$) to the annual PM10 average and reference to the method used, starting with the year 2005 *1	
	Apportionment (estimate) of the transboundary contribution to Member States and/or other countries *1	
	For exceedances of the daily limit value: Number of exceedance days which remain after subtracting days with exceedances due to transboundary pollution *1	
	Member State(s) which were consulted, and date(s) of consultation	
	Topic of consultation	
	Reference to relevant documents	
	Outcome of the consultation (expected reduction of emissions of relevant sources and expected improvement of air quality)	
	Justification if no consultations were undertaken	
	Reference to document which explains in detail why the exceedance is due to transboundary pollution	
h.	Comments for clarification if needed	

¹ Give page reference(s) to from where this information is derived in the notification supporting documents e.g. air quality plan..

Notes on Form 10

One column to be filled in for each exceedance situation.

Sub a. This should correspond to the code number of the exceedance situation on Form 2a.

Sub b to g: For each exceedance situation, at least one of the sections b to g has to filled in:

If site-specific dispersion characteristics are claimed using the method suggested in the Communication, sub b has to be filled in

If site-specific dispersion characteristics are claimed using an alternative method, sub c has to be filled in

If adverse climatic conditions are claimed using the method suggested in the Communication, sub d has to be filled in

If adverse climatic conditions are claimed using an alternative method, sub e has to be filled in

If transboundary air pollution is claimed using the method suggested in the Communication, sub f has to be filled in

If transboundary air pollution is claimed using an alternative method, sub g has to be filled in