Commission of the European Communities

Brussels,
C(2009)xxx final

Draft

Commission Decision

of […]

on the notification by Belgium of an exemption from the obligation to apply the limit values for PM₁₀
Draft

COMMISSION DECISION

of [...] on the notification by Belgium of an exemption from the obligation to apply the limit values for PM$_{10}$

(Only the Dutch and French texts are authentic)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe$^{1}$, and in particular Article 22(4) thereof,

Whereas:

(1) Belgium notified the Commission by letter registered on 26 November 2008 of an exemption from the obligation to apply the daily limit values for PM$_{10}$ in the 11 air quality zones listed in the Annex to this Decision. The air quality limit values for PM$_{10}$ have been legally binding since 1 January 2005 in accordance with Directive 1999/30/EC of the European Parliament and of the Council of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air$^{2}$.

(2) In accordance with Article 22(2) of Directive 2008/50/EC a Member State may be exempt from obligations to apply the limit values for PM$_{10}$ if all appropriate abatement measures have been taken at national, regional and local level to achieve compliance by the deadlines in Directive 1999/30/EC, the principal cause of the exceedence can be attributed to site-specific dispersion characteristics, adverse climatic conditions or transboundary contributions, and that an air quality plan is established demonstrating conformity with the limit values will be achieved before the new deadline.

(3) The notification has been assessed in accordance with the guidance set out in the Commission Communication 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 on ambient air quality and cleaner air for Europe$^{3}$,

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$^{3}$ COM(2008)403
("the Communication"). The notification was submitted using the forms set out in the Staff Working Paper\(^4\) that accompanied the Communication.

(4) The Commission identified certain relevant information as missing from the original notification, and requested the Belgian authorities by letter dated 23 January 2009 to complete the notification. The Belgian authorities submitted additional information by letter dated 13 February 2009.

(5) The Belgian notification was accompanied by air quality plans for all the zones concerned. The assessment shows that some information required pursuant to Part A of Annex XV to Directive 2008/50/EC has not been included, more precisely the observed and planned effects of certain measures to improve the air quality situation (points 7 and 8 of Part A of Annex XV).

(6) The Belgian authorities have provided data for the year 2005 to be used as reference year and basis for the assessment. The Commission notes that 2005 is appropriate for the purpose of assessing whether the conditions are fulfilled.

(7) In order to assess whether the conditions for the PM\(_{10}\) exemption are satisfied, it is necessary to identify the main sources of pollution contributing to the observed concentrations. That source apportionment should be precise enough to allow an understanding of which measures should be taken to address the main sources of pollution.

(8) The Belgian notification indicates that in all zones, traffic is an important domestic anthropogenic source contributing to the high concentrations in the urban background and at the local level. Only in the Walloon region (zones 8, 9 and 10), is industry the dominating source. As regards the regional background, the main single source is transboundary pollution which according to the Belgian authorities accounts for approximately 65% of the contributions in all zones. It should however be noted that in zones 8, 9 and 10, the regional background accounts for only approximately 30% of the total contributions which means that the transboundary contribution in those zones only accounts for around 19% of the total contributions.

(9) A comparison with the 2005 data collected under the cooperative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe ("EMEP") supports that the transboundary contribution identified by the Belgian authorities is an appropriate average for the zones in Belgium. It should however be stressed that a more precise determination of the transboundary contribution, taking into account the spatial variation in the different zones, would have allowed a more accurate identification of the share of the concentration levels that could be addressed by domestic measures.

(10) The assessment by the Commission confirms however that the identification and quantification of the contributions from the different sources provided by the Belgian authorities give a relevant and reasonable basis for the assessment.

(11) The notification provides that both transboundary pollution and adverse climatic conditions are the chief causes for the high concentration levels in all zones.

\(^4\) SEC(2008)2132
For transboundary pollution to be considered the chief cause of the exceedance, the Member State should demonstrate that exceedances of the limit values are eliminated once the transboundary contributions have been deducted. The method used by the Belgian authorities for demonstrating this is different from the one indicated by the Commission in the Communication and does not appear to provide an equivalent result as it takes into account only the days where the transboundary pollution alone is enough to exceed the daily limit and not all days in which it is just the increment due the transboundary contribution that triggers the exceedance situation. With the method indicated by the Commission, it can be demonstrated that transboundary pollution is a chief cause of the exceedances in all zones except zones 8, 9 and 10. As the method indicated by the Commission is the one used by most other Member States, the Commission considers, for the purpose of ensuring equal treatment, that it is appropriate to base its assessment on the method indicated in the Communication. As a consequence, the Commission finds that the exceedance situations can be chiefly attributed to transboundary contributions in zones 1 to 7 and zone 11.

In zones 8, 9 and 10, the source apportionment in the notification indicates that emissions from industrial installations are of more importance in causing the high concentrations than the contributions from transboundary pollution. In their reply to the Commission's request for additional information the competent authorities confirm that the daily limit value continues to be exceeded in zones 8 and 10 also after the deduction of the transboundary contribution. Since the limit values apply throughout the territory, the Commission finds that it cannot, as the Belgian authorities claim, be validly argued that high concentrations at some locations should not be taken into account because they are not representative for the zone as a whole. As a result the Commission finds that it cannot be demonstrated either through the Commission method or the method used by the Belgian authorities that the exceedances are eliminated in zones 8 and 10 once the transboundary contributions are deducted. As regards zone 9, the information available does not allow the Commission to fully assess whether the deduction of the transboundary contributions will result in concentration levels below the limit values.

It is not clear from the information provided by the Belgian authorities if the criteria for adverse climatic conditions indicated in the Communication are met in zones 1 to 7 and zone 11. However, since the transboundary contribution in itself is enough to explain the chief cause of the exceedance, it is not necessary to further consider the impact of the adverse climatic conditions for those zones. In the case of zones 8 and 10, the notification indicates that concentration levels above the daily limit value also occur on days when the wind-speed criteria indicated by the Commission in the Communication are not met. On the basis of the information available to the Commission, it cannot however be fully assessed in relation to those zones or in relation to zone 9 if exceedances occur principally on days when adverse climatic conditions are present.

In order to assess if all appropriate measures were taken before the 2005 attainment date, it is necessary to consider when an exceedance triggering abatement action pursuant to Directive 1999/30/EC first occurred in the zone, the relevance of the measures taken in relation to the identified sources and the impact of the external factors, such as transboundary contributions.
According to the officially reported air quality data from Belgium the annual mean concentration levels indicating more sustainable long term trends have been steadily decreasing and were in most zones below or close to the annual limit value in the years 2002 to 2005. Only in zone 10 was a significant increase in the annual mean concentration levels reported. The daily limit value plus the margin of tolerance were exceeded in all zones as from the first year of mandatory reporting of PM\textsubscript{10} air quality data in 2002. The trends indicate a steady reduction in 2004, levelling off in 2005. However, in zone 10 the number of days in exceedance almost doubled between 2004 and 2006.

In zone 1, the first exceedance of the daily and annual limit values plus the margin of tolerance was officially reported to the Commission in 2002. The competent authorities in the Brussels Capital region have demonstrated that a number of measures were taken prior to 2005 to reduce concentration levels. The Commission's assessment indicates that the measures were relevant for addressing the identified sources. In particular, local measures addressing industrial sources were effective in reducing concentration levels. The Brussels authorities have indicated that although measures were taken against pollution from traffic, the impact of those measures was overestimated. The contributions from transboundary pollution together with the difficulties of effectively addressing traffic sources within the given time scope and low impact of Community measures addressing traffic have been given as explanations of why compliance could not be achieved in that zone by the attainment date in 2005.

The Commission notes that action was taken to address the relevant sectors contributing to the high concentrations prior to 2005. A structured approach to tackling urban air quality problems has also been demonstrated through the adoption of several action plans by the Brussels Capital Region. A structural air quality plan was adopted in 2002 with the aim of \textit{inter alia} reducing PM\textsubscript{10} concentration over a period of seven years. In addition a regional mobility plan and a regional development plan were adopted prior to 2005. All three plans strive to limit road traffic. The Commission considers, taking into account the complex and multiple sources contributing to the concentration levels in this zone, that on balance the abatement action taken in zone 1 prior to the 2005 deadline was appropriate.

In zones 2 to 7, the competent authorities of the Flanders region have indicated that although exceedances triggering an obligation to take abatement action occurred for the first time in 2002, it was only in the analysis of validated data in 2003 that the authorities recognised that they were facing a structural problem with high PM\textsubscript{10} concentrations. According to the authorities, the causes of exceedances were not initially clearly understood and as a result further studies were necessary in order to identify the appropriate abatement measures. An air quality plan was prepared and adopted in 2005. The authorities have stressed the importance of transboundary pollution and the limited scope and effectiveness of abatement action addressing the local anthropogenic sources. Those sources only constitute approximately 30% of the total contributions in the zones in question. In addition, the impact of Community measures addressing traffic was according to the competent authorities lower than expected.

The Commission notes that certain relevant abatement measures addressing the main sources such as transport, industry, agriculture and heating were taken prior to the
attainment date in 2005 in zones 2 to 7, but that a more comprehensive approach was established only through the plan in 2005. The Commission acknowledges that the air quality situation in these zones was complex due to the presence of several different and diffuse pollution sources and that it was appropriate to study the problems further in order to identify the most effective remedies. The Commission also takes into account the important contributions from transboundary pollution and the significant impact that would have been required from local abatement action in order to effectively reduce concentration levels. The Commission considers, taking into account the complex and multiple sources contributing to the concentration levels in this zone, that on balance the abatement action taken in zones 2 to 7 prior to the 2005 deadline was appropriate.

(21) In zones 8 to 11, exceedances of the limit values plus margin of tolerance have been recorded by the competent authorities in the Walloon region since 2001. The notification indicates that traffic is an important contributor in all those zones, but that in zones 8, 9 and 10 the main anthropogenic pollution source is industrial installations. This source apportionment is also consistent with the air quality plan that was adopted in 2003. The plan identified the revision of the environmental permits for the industrial installations as a necessary measure but indicated that the investments required could only be made over a time period going beyond the 2005 attainment date.

(22) The competent authorities claim that abatement measures addressing the industrial installations were taken prior to 2005, however very little specific information is given to support this either in the notification or in the reply from the competent authorities to the Commission's request for additional information. In the 2003 plan it is specified that measures addressing the industrial sources would be implemented in three phases beginning in 2005 and ending in 2010 with a transitory phase in 2004. In addition, it can be noted that traffic appears only to have been addressed prior to 2005 in those zones through certain national level abatement measures.

(23) The Commission notes that in zones 8, 9 and 10 the competent authorities were already aware in 2001, and in any case at the latest in 2003 when the air quality plan was adopted, that the main pollution sources in those zones were industrial installations. However, the notification indicates that most of the measures identified to address those sources were neither planned to take effect nor implemented prior to 2005. A majority of the industrial installations in the zones concerned are still lacking permits in accordance with Directive 2008/1/EC of the European Parliament and of the Council on integrated pollution prevention and control. Such permits were required in 2007. Moreover, the competent authorities appear to have been unprepared for the drastic increase in concentration levels that occurred in zone 10 in 2005-2006, despite the fact that this increase can be clearly linked to the restart of industrial activity in that zone. Against that background, the Commission finds that the competent authorities have not demonstrated a sufficient awareness of the causes for the exceedances or the available remedies for the Commission to consider that the abatement action taken in those zones was appropriate.

(24) The Commission notes that zone 11 has a more diverse set of sources with transboundary pollution being the dominating contributor. The notification also

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indicates that certain measures were taken addressing at least one industrial source which effectively led to reduced emissions as well as concentration levels. It also results from the notification that construction work was for a limited period significantly contributing to the elevated concentrations in this zone. The Commission considers, taking into account the complex and multiple sources contributing to the concentration levels in this zone, that on balance the abatement action taken in zone 11 prior to the 2005 deadline was appropriate.

(25) The Commission recognises that the transboundary contributions originate in several Member States and that it may not be possible to identify individual sources in those Member States that contribute significantly to the high concentration levels of PM$_{10}$ in Belgium. It appears as though consultations have however been held with the competent authorities of certain neighbouring Member States or regions in accordance with Article 8(6) of Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management, and it results from the notification that there is a system for exchanging air quality information with the neighbouring states, in particular as regards forecasts of peak pollution periods.

(26) In order to assess if compliance with the limit values for PM$_{10}$ can be achieved at the expiry of the exemption period, it is necessary to consider the concentration levels estimated at that date by the Member State, and the estimated impact of the additional measures proposed to ensure compliance in the air quality plan accompanying the notification.

(27) The Belgian authorities have performed most of their assessments for the purpose of the notification, such as the source apportionment, on the basis of annual average concentrations, and estimated that a reduction of the annual mean concentration level of PM$_{10}$ to 31 ug/m$^3$ would also allow compliance with the daily limit value. A similar ratio between the daily and annual limit values has been used by other Member States, and the Commission considers that it is relevant for determining the level of ambition of the abatement action needed in Belgium.

(28) In zone 1 (Brussels region) as well as in zones 2 to 7 (Flanders region), the competent authorities have estimated that without additional measures taken, the daily limit value will continue to be exceeded at the expiry of the exemption period, in busy streets and similar "hot spot" situations. Several measures addressing the relevant sources are being implemented or are planned. This includes measures to be taken in the short term such as an emergency plan against PM$_{10}$ in zone 1 and "smogalarm" plan in zones 2 to 7. The implementation timetable provided by the competent authorities indicates however, that several of the measures will only be fully implemented after the new attainment date in 2011. Moreover, neither the air quality plans nor the notification indicate what improvement of the air quality is expected from those measures or if the authorities consider that compliance with the daily limit value will be achieved at the new attainment date through the indicated additional abatement action.

(29) The assessment of the Commission indicates that it is unlikely that compliance with the daily limit value at the expiry of the exemption period can be achieved in zones 1

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to 7 without additional measures being implemented. The Commission cannot however, on the basis of the information provided, fully assess if the measures listed in the air quality plans or in the notification are appropriate for achieving compliance. Moreover, the Commission notes that some of the measures listed in Section 3 of Part B of Annex XV to Directive 2008/50/EC have not been considered or are only at the stage of discussion. This includes measures such as the establishment of low emission zones and congestion pricing which are measures relevant and potentially necessary for the addressing the main pollution source in those zones.

(30) Accordingly, the Commission finds that objections should be raised against the exemption from the obligation to apply the daily limit value for PM$_{10}$ in zones 1 to 7, on the grounds that it cannot be fully assessed on the basis of the current air quality plans if the measures indicated by the competent authorities will ensure that compliance with the daily limit value is achieved at the expiry of the exemption period on 10 June 2011.

(31) In zones 8 to 11 (Walloon region), the competent authorities have in their reply to the Commission's request for additional information stated that contributions to the local concentration from industry are expected to be radically reduced in the period preceding the 2011 attainment date. Based on the average situation achieved through that reduction, it is claimed that compliance will be achieved in 2011.

(32) The assessment of the Commission confirms that the result expected by the competent authorities from the abatement action to be implemented relates to the average situation in the zones. As the limit values apply throughout the territory it must however be demonstrated that compliance is achieved also in the locations with the highest concentrations. The assessment confirms that it is likely that compliance could be achieved in zones 8 and 11, provided that the measures indicated by the competent authorities are implemented in a timely and adequate manner. In zones 9 and 10 the estimated reductions would however not be enough to ensure that compliance is achieved also in the locations with the highest concentrations. Moreover, it is not clear for any of the zones 8 to 11 to what extent the implementation of the measures indicated in the notification and in the air quality plans have been formally agreed by the competent authorities. It appears that a number of relevant measures are still only being discussed. As a consequence, the Commission finds that it cannot on the basis of the available information assess if the measures indicated in the notification and in the air quality plan are sufficient to ensure that compliance is achieved in zone 8 to 11 by the expiry date.

(33) In respect of zones 8, 9 and 10, in which industrial installations constitute the main source, the Commission also notes that the competent authorities have not complied with the deadline for ensuring that the relevant installations are working with permits in accordance with best available technique pursuant to Directive 2008/1/EC. It is also noted that a number of the abatement measures listed in Section 3 of Part B of Annex XV to Directive 2008/50/EC have not been considered or are only under the discussion. The Belgian authorities are therefore strongly invited to take those measures into account when establishing the air quality plans.

(34) As regards the status of implementation of the Community legislation listed in Part 2 of Section B in Annex XV to Directive 2008/50/EC, the Commission notes, that Belgium expects the national emission ceiling set for nitrogen oxides pursuant to
Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants to be significantly exceeded in 2010. Compliance with the obligations under that Directive is important in order to ensure that the limit values under Directive 2008/50/EC, and in particular the limit values for PM$_{10}$, can be met both in Belgium and neighbouring Member States. The Commission therefore expects that the necessary effort is taken to achieve the national emissions ceilings by the attainment date in 2010.

Against that background, the Commission finds that objections should be raised against the notification by Belgium of an exemption from the daily limit values for PM$_{10}$ in zones 1 to 11 on the grounds that it cannot be fully assessed if compliance with the daily limit value can be achieved at the expiry of the exemption period on 10 June 2011.

The Commission finds that objections should also be raised against the notification by Belgium of an exemption from the daily limit value for PM$_{10}$ in zones 8, 9 and 10 on the grounds that appropriate measures were not taken to achieve compliance by the 2005 attainment date. It is furthermore not fully demonstrated in those zones that conformity with the limit value cannot be achieved because of adverse climatic conditions or transboundary contributions.

HAS ADOPTED THIS DECISION:

**Article 1**

Objections are raised against the notification by Belgium of an exemption from the obligation to apply the daily limit value for PM$_{10}$ set out in Annex XI to Directive 2008/50/EC in zones 1 to 11 as specified in the Annex to this Decision.

**Article 2**

This Decision is addressed to the Kingdom of Belgium.

Done at Brussels, […]

For the Commission

Stavros DIMAS
Member of the Commission

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### ANNEX

Zones and agglomerations covered by the notification in accordance with the delimitations applicable in the annual air quality report for the calendar year 2007.

<table>
<thead>
<tr>
<th>Zone Number</th>
<th>Zones and agglomerations</th>
<th>Zone name</th>
<th>Regions</th>
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<tbody>
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<td>1.</td>
<td>BEB10A</td>
<td>BRUSSELS</td>
<td>Brussels Capital region</td>
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<tr>
<td>2.</td>
<td>BEF01S (BEF01A in 2005)</td>
<td>PORT OF ANTWERP</td>
<td></td>
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<td>3.</td>
<td>BEF02A</td>
<td>ANTWERP</td>
<td></td>
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<tr>
<td>4.</td>
<td>BEF03S (BEF03A in 2005)</td>
<td>PORT OF GHENT</td>
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<td>5.</td>
<td>BEF04A</td>
<td>GHENT</td>
<td></td>
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<tr>
<td>6.</td>
<td>BEF05S (BEF05A in 2005)</td>
<td>CITIES&gt;50000 inhabitants</td>
<td></td>
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<tr>
<td>7.</td>
<td>BEF06S (BEF06A in 2005)</td>
<td>FLANDERS</td>
<td></td>
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<tr>
<td>8.</td>
<td>BEW11S</td>
<td>LIEGE</td>
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<tr>
<td>9.</td>
<td>BEW12S</td>
<td>ENGIS</td>
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<tr>
<td>10.</td>
<td>BEW13S</td>
<td>CHARLEROI</td>
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<tr>
<td>11.</td>
<td>BEW14S</td>
<td>WALLONIE</td>
<td></td>
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