Council of the European Union
General Secretariat

Interinstitutional files:
2022/0347 (COD)

Brussels, 22 March 2023

WK 3880/2023 ADD 2

LIMITE

ENV
ENER
IND
TRANS
ENT
SAN
AGRI

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

CONTRIBUTION

From: To:	General Secretariat of the Council Working Party on the Environment
N° Cion doc.:	ST 14217/22 + ADD 1
Subject:	Air Quality Directive: follow-up to the meeting on 9 March- comments from a delegation

Following the call for comments (WK 3449/23), delegations will find attached comments received from Poland.

POLAND

Commentary of the Republic of Poland to the article 7-11 Proposal for a Directive of the European Parliament and of the Council on ambient air quality and cleaner air (recast)

Article 7 Assessment regime

- **Paragraph 1:**

PL opposes the removal of the distinction between an upper and a lower assessment threshold (like in case of art. 4 point 18).
PL gives negative opinion on this provision, also to the accompanying provisions in Annex II, which introduces the tightening of these thresholds for individual pollutants and also due to the fact that it introduces the five-year air quality assessments.
This will cause, due to such low concentrations, e.g. threshold for B(a)P is estimated at 0,12 ng/m^3, that it will not be possible to define measurement methods to measure such accurate and required use of the number of stations. This will result in significant increase financial outlays for air quality monitoring.
A good direction is to simplify the provisions on assessment thresholds by abandoning the thresholds for criteria, e.g. for PM10, which currently has lower and upper thresholds separately for the averaging time of 24 hours, and for the year. However the adopted value of the estimation thresholds should be more realistic.

We propose to stay with the analogous values of the assessment thresholds as currently in force (while leaving both upper and lower thresholds in place). Alternatively, we propose to adopt the assessment thresholds at the level of the existing upper assessment thresholds.

Such a situation will make the provisions of Article 8 need to be adjusted. Article 8 introduces, in addition to the assessment threshold, a criterion for limit values (and a target value for ozone), but referring to new limit values to be attained by 1 January 2030 (Annex 1, Section 1, Table 1). Article 8 would therefore have to be modified accordingly (it would have to refer to the existing limit values and existing (that are now in force according to dir. 2004/107/EC and 2008/50/EC) target values).

Section 2 of Annex II lacks requirements for ozone.

- **Paragraph 2:**

Is this point refer only to changes in activity or also (equivalently) to significant changes in concentrations? Changes may be caused not only as a result of changes in emissions but also due to other factors that may be of a permanent trend (e.g. climate) - especially in the case of ozone.

Article 8 Assessment criteria

- **Paragraph 1-4:**

Article 8 introduces, in addition to the tightened assessment thresholds, a criterion for limit values (and a target level for ozone), but referring to new limit levels to be achieved by 1 January 2030 (Annex I, Section 1, table 1). PL take a negative view of this approach.

As currently drafted, Article 8 forces fixed measurement in the case of exceedances of the (tightened) assessment thresholds, and in the case of exceedances of the (tightened) limit values it also forces the use of modelling in the zones. At the same time, Annex III (Section A) significantly increases the requirements for the number of sampling points for fixed measurement compared to the current legislation. This means, not only for Poland, but also for many other Member States, a significant increase in the cost of air quality monitoring.

Article 8 should refer to the existing limit values in Annex I, Section 1, Table 2, except that for arsenic, cadmium, nickel and benzo(a)pyrene in PM10. There should be target values, not limit values.

Also, Article 8 should refer to the assessment thresholds remaining at the same level as before (corresponding with upper assessment thresholds).

- **Paragraph 2:**

The term “adequate information" is unclear and there is no reference to the criterion of "adequacy".

- **Paragraph 5:**

Paragraph 5 is not feasible, deletion or major rewording necessary:

It is not clear how large an exceedance area in a zone is meant to be metered (e.g. what if there are many small exceedance areas in a zone that is a size of a province (like NUTS 2), is each exceedance area to have a separate station? How large are these areas to have to be metered, any limitations? What if one year a particular exceedance area is determined by modelling in one place and in another year it is slightly shifted? Is the station also to be shifted every year?

This provision is inadequate to the reality. Planning for commissioning a station is usually done several years in advance (based on identified needs in the 5-year air quality assessment, identified areas of exceedance, etc.). The process of obtaining funding for equipment, agreeing locations is ongoing. On top of this, there is also the necessary work involved in siting the station, obtaining permits, signing a land lease/lease agreement, connecting utilities. It is unrealistic to start measurements in a place where they did not previously exist immediately after the end of the year in which the exceedance occurred (even before the annual air quality assessment!).

Annex IV (Section A)

References to ozone (target value) are missing, should be added. PL propose to leave the target values for As, Cd, Ni and B(a)P in place and are therefore of the opinion that target values (plural) should also be added to Annex IV Section A in addition to the limit values.

- **Paragraph 6:**

The term 'long-term trends' appears here, where we have the introduction of 'sampling points' and there is mention of at least one year.

PL asks what is meant by "long-term" trends? It can be a week or, for example, 5 years?

- **Paragraph 7 and Annex III (Section D):**

The EC states in a calculation in one of its documents ("Systematic assessment of monitoring of other air pollutants not covered under Directives 2004/107/EC and 2008/50/EC") that in total, 28 new UFP sampling points would have to be set up including monitoring supersites. In view of the very high costs of purchasing analysers, maintenance, including calibration, while there is no specific reference method for UFP measurements, PL advocate the deletion of paragraph 7 in its entirety. UFP measurements should remain in the realm of scientific research.

We also disagree with the vague provisions in Annex III (D) regarding the location of UFP sites next to particulate matter and NO_2 sites referring to Section A of Annex III. The proposal for additional UFP sampling points (beyond monitoring supersites) should be clearly stated in Section A 1 of Annex III for the Member States for an opinion, and not somehow hidden in Annex III (Section D).

Annex VII (Section 3)

The provisions of Annex VII Section 3 indicate that UFP measurements should be carried out in multiple locations due to the diverse sources. As above, our position is that UFP measurements should remain in the realm of scientific research.

- **Paragraph 8:**

This is the only mention of bioindicators in the entire text of the Directive. PL propose to delete it. If monitoring with bioindicators is necessary for the purposes of Directive 2016/2284, it should be done under the Directive 2016/2284 and not under the Directive on ambient air quality and cleaner air for Europe, which deals with completely different monitoring.

Please also clarify what is meant by the abbreviation 219/2009 (used as an explanation of Article 8).

Art. 4 (definitions):

p. 14 – we stand by our previous comments:

As in the case of black carbon (BC), we take a strong negative view on the introduction of an obligation to measure UFP while not specifying a reference method in Annex VI (no CEN standard), which implies that THE Member States would have to investment in stations and equipment of unknown quality and without the possibility of comparison with other countries due to the likeliness of using different methods and equipment. This is contrary to Article 2(2) of the draft directive. We believe that as long as there are no reference measurement methods developed such measurements should remain in the realm of scientific research only.

UFP measurements are very expensive. For Poland, the EC document "Systematic assessment of monitoring of other air pollutants not covered under Directives 2004/107/EC and 2008/50/EC" (October 2022) estimates that for UFP monitoring alone, 28 new UFP measurement stations will need to be installed at a total cost of EUR 1 120 000 (only the cost of measurement equipment, plus the cost of containers, station equipment, connections, etc.), with annual running costs of EUR 280 000 per year (we have not measured UFP to date so we cannot verify the costs).

In addition, the definition of UFP is flawed. We support AQUILA's proposal ('ultrafine particles' (UFP) means a subset of PM2.5, commonly defined as particles with at least one dimension less than 100 nanometres (nm) and usually expressed in particle number concentration (number of particles per cm^3), but reject, as mentioned above, the whole proposal to make UFP monitoring mandatory.

What is the purpose of measuring UFP under this directive with all the rest of the PM measurements? We do not see the added value of introducing additional PM testing in the form of BC and UFP and others. The draft directive does not make this objective clear.

p. 22 – we reiterate our previous comments on the lack of validity of the definition of the representativeness of a sampling point without clear guidance from the EC on how to determine such representativeness.

Article 9 Sampling points

Discussion of sampling points - should be stated earlier, or cross-references to this article should be made wherever this concept is used.

- **Paragraph 1:**

Unclear highlighting of ozone in second sentence. Information on ozone should be included in the first sentence.

- **Paragraph 3 (c):**

Concentrations of many of the pollutants (e.g. particulate matter, ozone) listed in Article 9(1) can vary widely from season to season, so it is incomprehensible to require measurements for only 2 months (minimum) per year.

- **Paragraph 4 and ANNEX VII (Section 2, A-C)**

PL note that the draft proposes to almost double the number of VOCs (compared to the current legislation) to be measured, with at least 1 station dedicated for this purpose. This obviously implies an increase in the cost of VOC monitoring. There is no justification for such an extension of the scope of measurement in the directive.

PL suggest that the list of VOCs should remain as before.

- **Paragraph 6:**

Does the wording of this paragraph mean that modelling results and indicative measurements should be taken into account for the air quality assessment?

PL propose to reword it in such way as to allow, for example, only fixed measurements with modelling results (no indicative measurements) or only measurements (no modelling) to be used in the assessment.

- **Paragraph 7:**

The provisions of paragraph 7 do not distinguish between exceedances of limit values (paragraph 7 should also refer to target values), which would only effectively apply from 2030 (Annex I, Section 1, table 1), and limit values that would apply from the implementation of the directive (Annex I, Section 1, table 2).

PL consider such provisions to be unjustified. Exceedances of limit / target values should only be determined for the currently applicable assessment criteria. This should be reworded.

In addition, in the case of a necessary relocation of such a measurement site it may be problematic to find a suitable site within the area of representativeness of the previous site. PL suggest softening this provision, e.g. "where possible".

Annex IV (Section B)

P. 2 Protection of human health
a (i).

It should be supplemented with information on target values.

a (iii)

We propose to remove, on the grounds that it is virtually a dead letter (to our knowledge there was no such question ever mentioned in EC or EEA documents or meetings). Otherwise we ask the EC to deliver detailed guidelines on how to meet this requirement.

b i f

The introduction of provisions for ports and airports is unclear. PL not see justification for introducing additional sources beyond industrial sources.

d

It is incomprehensible to make a special distinction between household heating sources when the regulations generally refer to such sources as diffuse sources. They usually occur as many small sources over a large area, hence it is better to treat them as diffuse sources rather than point sources. PL propose to delete point d.

g

We consider point g to be redundant with the already proposed provisions for increased monitoring when assessment thresholds are exceeded - an obligation for fixed measurements together with modelling. As mentioned earlier it is difficult to require from the Member States the clearly defined area of representativeness of the sampling points without clear guidelines on how to do it. In addition, we would like to underline that measurements at sampling points are carried out at points and their number is defined. However, this does not mean that their area of representativeness must necessarily cover the entire zone area. Often this will probably not be possible. The provisions of point g regarding the representativeness of the sites are questionable.

In the part starting with "When defining the spatial representativeness area the following associated characteristics shall be considered...":

a

We propose to delete the text: "but shall be limited in its extension by the borders of the air quality zone under consideration".

d

What tolerance levels are involved? This is not specified anywhere in the project.

p. 4 (under the table)

Dead letter for Regulation 1737/2006, we propose to delete (to our knowledge there was no such question ever mentioned in EC or EEA documents or meetings).

Annex IV (Section C)

a

We propose to remove: "or, for sampling points at the building line, of at least 180°". This is a flow disturbance. However, the intake should be set back enough from the development to allow for an arc of at least 270°. We also propose to change " at least 1,5 m" to "normally some meters" (this was in the original Directive 2008/50/EC, before the amendment).

b

We propose to insert '1.5 m' instead of '0.5 m'.

Annex IV (Section D)

There are reservations about the extensive obligation to document the selection of station locations. Much of the information is duplicated (e.g. information on additionally measured VOCs, measurements of PM composition and even information on compliance with the micro-location). The question has to be asked about the rationale for additional collection of this information at this location.

Since they are already routinely sent as part of e-Reporting to the European Commission via the Central Data Repository of the European Environment Agency. In addition, making all this documentation available to the public is questionable. This is technical documentation, not information written in an accessible way for the public. One should be distinguished from the other and Annex IV Section D should be simplified and possibly something more detailed in Annex IX.

Annex III

We take a negative view of the significant increase in the minimum number of measurement sites per zone (Section A) and this still with significantly tightened assessment thresholds. We do not see any justification for this measure. In the current situation, it is very disadvantageous from an economic point of view with little added value (densifying the measurement network will not add much additional knowledge about pollutant concentrations with the already widespread use of modelling, and even less will it improve air quality simply because there will be more stations. More than that, instead of allocating resources to improving air quality Member States will have to spend them on extensive expensive monitoring). Additionally we do not see the added value for complicated provisions like sum PM (with hidden provisions of UFP), four tables instead of one in Section A, additional provisions under table 4 (not clear if it refers to the four tables).

Annex III (Section B)

We note that here, too, the extension of the calculation of the average exposure indicator to NO_2 entails a revision of the measurement network, redesign and commissioning of additional measurement stations for NO_2, and thus additional costs. We take negative view of extended provisions that will generate huge costs of air quality monitoring.

Comments on Annex III (Section D) are listed above with comments on Art. 8.

Art. 4 (definitions):

p. 24 – the definition is about stations that measure pollution for assessment regarding protection of vegetation but the definition only mentions representativeness for the population.

Article 10 Monitoring supersites

PL takes a negative view of the article on monitoring supersites.

But if not it would be useful to set out a definition of 'supersite' (from paragraph 25) in the introduction to this article, expanded to include the purpose stated in the explanatory memorandum (p. 13).

While some existing rural background stations in Poland can be modified into rural background supersites, urban background supersites have to be designed and equipped from the beginning. Again, significant funding will be required to set up and conduct these measurements.

The proposed measurements of new substances are scientific in nature and should not be carried out as part of routine monitoring studies, which are covered by the proposal, but as part of scientific projects. Therefore, we do not see the justification for including this type of research as mandatory under this directive.

We note that for the measurements of the new substances, no reference methods are specified in Annex VI, which also makes it difficult to determine the costs of carrying out these measurements.

We also have our doubts about the extension of monitoring at urban background stations to substances that were not previously monitored there (they were monitored at rural background locations). E.g. the measurement of gaseous mercury is also very expensive and the draft directive envisages the launch of mercury measurements at least 3 additional urban background sites (at urban background supersites).

- **Paragraph 6 (b) and ANNEX VII (Section 1):**

In PL opinion, this is redundant in this directive and should be subject of scientific projects. The composition of particulate matter is already being studied very extensively. In PM2.5, for example, EC and OC have so far been measured; now black carbon (BC) would still be measured at the same stations.

- **Paragraph 7:**

PL proposes to delete paragraph 7. There is no need for additional mercury speciation studies in routine monitoring studies. Such studies can be carried out in the framework of scientific projects, which is not the subject of the Directive.

Art. 4 (definitions):

p. 13 – We take a negative view of the introduction of an obligation to measure black carbon (BC) without a reference methodology, thus also the definition of BC.

p. 25 – the proposed definition of supersite may remain, provided that the scope of monitoring is not extended to include the new substances identified in Article 10.

Article 11 Reference measurement methods and data quality objectives and Annex VI

We take a negative view of the lack of reference methods for the new pollutants for which the draft directive makes measurement mandatory, including UFP, BC, ammonia, particulate matter oxidative potential, size distribution of ultrafine particles.

ANNEX V:

PL support the comments of AQUILA on the Annex V.

Also AQUILA states in comments for Annex V that: "It should be noted that a method for calculating uncertainties of annual means does not currently exist for automatic / equivalent

measurement instruments (and also low-cost sensors). A method for this needs to be added to the Guide for the Demonstration of Equivalence, which AQUILA plans to review and update in the coming years."

Therefore, if a method for calculating uncertainties of annual means does not currently exist for automatic / equivalent measurement instruments, we question the introduction of uncertainty range 15-20% taken for PM10.

Our experience shows, that especially for optic measurement method, majority of uncertainty daily mean values (assess in according to sheet annexed to Guide for the Demonstration of Equivalence) is in the range 20-25%.

PL draws attention to unspecified issues:

1. No clear guidance on how to calculate modelling uncertainty.
2. It is unclear how to calculate MQI (modelling quality indicator) - additional description is needed, preferably a mathematical formula/equation.
3. No guidance on which measurement uncertainty thresholds to use - relative or absolute? In which pollutant concentration ranges which threshold to apply?
4. Too high dependence of the modelling uncertainty ratio on the measurement uncertainty. For very low values of measurement uncertainty, model accuracy may not be achievable. In the theoretical case where the measurement uncertainty would be 0, the uncertainty and hence the modelling error would also have to be 0, which is absolutely impossible given the complexity of the process, the physical dependencies, and the uncertainty associated with the meteorological data and the estimation of the emission data fed into the models.
5. Lack of a clear method for determining the uncertainty of the objective estimation.
6. Lack of a "Maximum ratio of the uncertainty of modelling and objective estimation over the uncertainty of fixed measurements" for the annual average for SO_2.
7. The maximum modelling to measurement uncertainty ratio for heavy metals (1.1) is rather too low taking into consideration their usually very low concentrations.