BELGIUM

Belgian comments and questions regarding the COM proposal on the revision of the AQD

General

Although we are still scrutinizing the proposal, we are generally positive towards it and appreciate the simplification it includes for quite some aspects of the directive such as the merging of the two existing directives and the assessment thresholds. When discussing the fitness check, the main attention points for Belgium where to bring the AQ standards more in line with the WHO guidelines, to increase the role of modelling and to include alert and information thresholds for particulate matter ($PM_{2,5}$ and PM_{10}). All these points have been included to some extent, which we strongly appreciate. Ambitious air quality standards are necessary to guarantee that all member states move in the same direction and that background pollution and transboundary air pollution are reduced.

As said, we are still studying the proposal and will refine our position during the coming weeks and months, but we are happy to share our first views, ideas and questions on the proposal in order to start the discussion on the text.

By article

[…]

Art. 15

- As stated in the introduction, Belgium has always pleaded for the introduction of alert and information thresholds for PM. We thus welcome the new alert thresholds.
- We suggest to lower the alert threshold for PM_{10} to maximum 70 $\mu g/m^3$.
- We suggest to introduce information thresholds for PM_{10} and $PM_{2,5}$ and to align those with the daily limit values (45 $\mu g/m^3$ for PM_{10} and 25 $\mu g/m^3$ for $PM_{2,5}$).
- The evaluation of the alert thresholds for PM should be based on measurements over three consecutive days. This implies that only when the threshold has been exceeded for at least three days, short term measures need to be taken. This long delay strongly reduces the possible effect of any short term measure. It would be more efficient if the alert thresholds is evaluated based on short term forecast-modelling and thus induce any measures taken.
- §4: member states using forecast modelling need to inform the public of any predicted exceedance, but there is no obligation for forecast modelling, which means that this article introduces some inequality.

Art. 17

- In the explanation, it is stated that this article is extended to include $PM_{2,5}$, but this seems incorrect.

Art. 18

- What is to be understood by 'site-specific dispersion characteristics'? Does this f.e. include monitoring stations in a street canyon?

[…]

Annex I & II

For most pollutants, the WHO guideline value (for the yearly average) has been proposed as the assessment threshold. However, for As, Ni, B(a)P and C_6H_6, there is no guideline value, there are only values associated with a certain number of additional cancer cases, whereby the concentration corresponding to a 1/100.000-cancerrisk is often referred to as the WHO guideline.

For both B(a)P and C_6H_6 the concentration corresponding with a 1/100.000 cancer risk is proposed as the assessment threshold, but for As and Ni, lower values are proposed (less than half, see table below, where we include the associated risk). This leads to a situation in which a concentration associated with a (f.e.) 1/105.000-risk triggers no action at all for one pollutant (B(a)P and C_6H_6), but implies an exceedance of the limit value for another one (As).

	1/100.000 risk	**Limit value**	**Assessment threshold**
As (ng/m^3)	6,6	6,0 (1/110.000)	3,0 (1/220.000)
Ni (ng/m^3)	25	20 (1/125.000)	10 (1/250.000)
B(a)P (ng/m^3)	0,12	1,0 (1/12.000)	0,12 (1/100.000)
C_6H_6 ($\mu g/m^3$)	1,7	3,4 (1/50.000)	1,7 (1/100.000)

We understand that limit values are a compromise between science and feasibility, but a more consequent approach for the assessment threshold should be considered.

As for the limit values, what is the argument for not proposing a lower value for B(a)P and C_6H_6 (in 2021, the 1,7 $\mu g/m^3$has been met already in well over 80% of the monitoring stations)? It could be considered as a target value in addition to a less stringent limit value.

[…]

Annex VIII

- §5: "to reach compliance within 3 years after adoption of the plan": according to art. 19, compliance needs to be reached within 3 years after reporting of the exceedance.
- §5 and §6: it is neither possible nor useful to estimate the concentration reduction for every measure included in the plan. Not possible, because this is a difficult and time consuming exercise and not useful, because the impact of multiple measures cannot simple be added. We therefore suggest to include this only for the total package of selected measures.

FINLAND

FI comments on articles 7-11 and 12-18 (with relevant Annexes)
15.3.2023

Chapter II: Assessment of ambient air quality and deposition rates (Articles 7-11 and relevant Annexes)

[This part contains some changes and additions to our comments sent previously on Articles 7-11.]

- We note that "deposition rate" is added to the title of the chapter and that "deposition" is also included to the definition of "level". However, text concerning deposition rates cannot be found under this Chapter or Annexes, and deposition measurements are only very briefly mentioned in one sentence in Article 10 in the whole Chapter. It would be advisable to review the Chapter if relevant text for deposition measurements is lacking. Also, in the current legislation the deposition of arsenic, cadmium, mercury, nickel, and PAHs is required, and now when the directives are combined, it may be relevant to consider if lead deposition should be included, as it can be easily measured simultaneously with the other metals, and it is included in the same reference method (standard EN 15841) as the other metals.

Article 7: Assessment regime (and relevant Annex)

- We support especially the simplification of the assessment thresholds under article 7. We can also preliminary support the tightening of all assessment thresholds.

Article 8: Assessment criteria (and relevant Annexes)

- We can support the proposed new requirement that in zones where limit values are exceeded both measurements and modelling should be used for the assessment, as it is very well known that point measurement alone cannot reliably capture the spatial distribution of concentration in these "hot-spot" areas. However, this new requirement should not cover ozone target values. (Article 8.3).
- The high concentration measurement sites of UFP are very important, since they provide information related to different pollutant problems and environments, such as vehicular traffic, shipping and airports. It would be important to have even more of these hot spots, since they are very useful for local air quality actions. A too sparse hot spot network would not give enough air quality data to capture the huge concentration variation in different microenvironments and to evaluate long term trends. (Article 8 point 7).
- Why are there no requirements to monitor BC in environments where concentrations are high? Our preliminary view is that BC should be added also under this monitoring requirement. WHO recommends the monitoring of UFP and BC due to health effects. BC would provide important additional information related to concentrations levels and trends caused by emissions from residential wood combustion, vehicular traffic and shipping. In current directive proposal there is only BC monitoring in rural and urban background

supersites. It would be especially important to get BC information from hot spot sites. (Article 8.7, Annex VII)
- See also comments concerning supersites in Article 10.

Article 9: Sampling points (and relevant Annexes)

- Modelling or indicative measurements should not always be mandatory when reviewing the adequacy of sampling points under article 9. We think that objective methods such as expert evaluation should be enough, if the air pollutant levels are already well known, based on previous air quality measurements and/or modelling, and they provide enough information for expert evaluation. (Annex IV point D 9)
- Editorial comment concerning paragraph 1: For simplicity, it would make sense to list first all the gases and then the PM and its' fractions, and include ozone to the first sentence:
    - 1. The location of sampling points for the measurement of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, >ozone, benzene, carbon monoxide,< particulate matter (PM_{10} and $PM_{2.5}$), lead, >~~benzene, and carbon monoxide~~< , arsenic, cadmium, nickel, benzo(a)pyrene in ambient air shall be determined in accordance with Annex IV.
    - >~~The location of sampling points for the measurement of ozone shall be determined in accordance with Annex IV.~~<
- Editorial comment concerning paragraph 7: It would be advisable to clarify that the last sentence refers to sampling points with exceedances (rather than all sampling points including the ones with concentrations below limit value). Our suggestion:
    - 7. Sampling points at which exceedances of any limit value specified in Section 1 of Annex I were recorded within the previous 3 years shall not be relocated, unless a relocation is necessary due to special circumstances, including spatial development. Relocation of >such< sampling points shall be done within their area of spatial representativeness and be based on modelling results.

Article 10: Monitoring supersites (and relevant Annexes)

- Monitoring new pollutants (black carbon, ultra-small particles and ammonia) is important. The WHO also recommends the monitoring of black carbon and ultrafine particles. Ammonia increases the formation of ultra-fine particles and fine particles, which is why its monitoring is justified. We think that the monitoring new pollutants would promote the systematic collection of information related to the environmental and health impacts of these pollutants in the EU. However, we have some concerns about the details of the monitoring requirements, such as:
    - The exposure to pollutants is highest in urban areas. Therefore we see that the minimum number of rural background supersites (1/100 000 km2) is too high for sparse populated and geographically large countries such as Finland. For example in Finland the current directive proposal would lead to 3 rural supersites and 1 urban background supersite. There should be more flexibility with regard to number of rural backgrounds. It could be for example cost-effective to divide the required measurements for rural background supersites between several rural background

stations so that each station would not have to measure all pollutants. We think that in practice, **the Spanish proposal** with regard to number of rural background supersites, would lead to desired outcome also for FI. According to Spanish proposal the number of rural background supersites proposed in the review of the directive could be reduced by a half (*100 000 km2 □ 200 000 km*), keeping at least one urban and one rural supersites even in small countries. This would mean that in FI the number of urban and rural background supersites would be the same: one of each. In our opinion this 1:1 would be the right ratio at least in FI. **Therefore we support this Spanish proposal**.

- Requirements to monitor metal concentrations and deposition annually in all rural and urban background supersites might be disproportionate where concentrations are very low. (Article 10.6). Furthermore, requirement of monitoring oxidative potential of particles in urban background supersite is quite demanding in view that there has not been a lot of measurements in Europe and mainly in campaigns. (Article 10.5)
- Should lead (currently PM10 fraction) be also included in the monitoring? (Article 10.6)
- We appreciate the inclusion of several new pollutants in the Proposal to gain wider understanding of the health relevant metrics. In the current version, all the pollutants are expressed as pollutants that have measurement requirements except particulate and gaseous divalent mercury, for which a recommendation for measurements is given. In the view of the Minamata Convention, we can understand this recommendation well. However, we wish to kindly ask the Commission to explain the reasons for this limited selection of recommendations, and moreover explain, if other pollutants not covered under current legislation but mentioned in the corresponding EC study (ref) were considered (such as pollen, levoglukosan, other heavy metals etc.) and especially those which are rather advanced regarding available techniques and standardization.

  Ref. European Commission, Directorate-General for Environment, Nagl, C., Bleeker, A., Ntziachristos, L., et al., Systematic assessment of monitoring of other air pollutants not covered under Directives 2004/107/EC and 2008/50/EC : with a focus on ultrafine particles, black carbon/ elemental carbon, ammonia and methane in ambient air, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2779/691266

- Regarding supersites, we wish to point out that it may be relevant to consider extensive measurements at also pollution hot spots (e.g., traffic, residual burning) rather than multiple background sites in order to understand better the sources, their attribution to air quality and air chemistry at sites where a complicated mixture of pollutants is existing in ambient air. Were these sampling point types considered in the Impact Assessment?

Article 11: Reference measurement methods and data quality objectives (and relevant Annexes)

- We want to draw attention to the fact that the air quality data concerning the new pollutants (BC, Ammonia (NH3), UFP, (particle size number distribution of UFP) would be almost entirely outside the scope of application of the data quality objectives in accordance with Annex V. They would only be subject to data coverage of measurements for ambient air

quality assessment as specified in Annex V, paragraph B. Finland considers it important that, in the long term, the air quality data concerning these new pollutants would more broadly fall within the scope of the data quality objectives. This would be important in order for air quality data from different countries to be comparable.

Annex II

Editorial comment: It is also noted that in Annex I the tables were numbered, but this is not the same in Annex II, so harmonisation is encouraged throughout the Directive.

Annex III

Table 2. Headline "Minimum number of sampling points if the number of sampling points is reduced by up to 50%" => Is this underlined section erroneous, and shouldn't it be the same headline as in Table 1? For ozone, this headline is valid for Table 4, so it seems that there has been a copy-paste error.

In point A 2, a new requirement to monitor BAT technique applications is mentioned. However, it is not clear what this means, does it apply to industrial sampling points, all pollutants or only some, and how it shall be done. Clarification is needed from Commission?

Annex IV

In Point B 2.g. (given in green below), we note that the new requirement to define representativeness of the sampling point is challenging to implement. E.g., in the case of wood combustion in residential areas where benzo(a)pyrene (for which a very low assessment threshold is proposed) is measured, the representativeness of one sampling point may be very limited area wise, and it is rather expected to represent the maximum concentration in the area, when the measurements have been located in an optimum way. The concept of representatives has been debated over the years, and the need of guidance has been identified, but it is still lacking. Therefore, we express our concern how well this new requirement can be implemented in Member States, at least until suitable guidance is available.

B. Macroscale siting of sampling points

2. *Protection of human health*

(g) sampling points shall, where possible, also be representative of similar locations not in the immediate vicinity of the sampling points. In the zones where the level of air pollutants is above the assessment threshold, the area which each sampling point is representative of shall be clearly defined. The whole zone shall be covered by the different areas of representativeness defined for each sampling points;

***

Please, specify if 'main wind direction' indicates a site upwind or downwind of the source (in point (f) main wind direction indicates upwind, right? Similar interpretation does not make sense in this sentence, unless this refers to additional site):

(d) where the objective is to measure the contribution of domestic heating, at least one sampling point shall be installed within the main wind direction of these sources;

***

Include lead ?

(i) sampling points measuring arsenic, cadmium, >lead<, mercury, nickel and polycyclic aromatic hydrocarbons shall, where possible, be co-located with sampling points for PM_{10}.

***

Should the breathing zone be 1,5 m as in the current Directive (is it perhaps a typo)? Should the text '(8 m)' be removed as it was deleted in the Directive 1480/2015? Maybe it is unintentional that it has been added again.

C. Micro-scale siting of sampling points

(b) in general, the sampling point inlet shall be between ~~0,5 m~~ >1,5m< (the breathing zone) and 4 m above the ground. Higher siting >~~(up to 8m)~~< may be appropriate if the sampling point is representative of a large area (a background location) or in other specific circumstances and any derogations shall be fully documented;

***

Editorial comment: This point is only relevant to traffic-oriented sites, so it should be specified (it is specified in the current legislation with different wording).

(e) for all pollutants >measured at traffic-oriented sites<, sampling probes shall be at least 25 m from the edge of major junctions and no more than 10 m from the kerbside; for the purposes of this point, a 'kerbside' means the line that separates motorised traffic from other areas; a 'major junction' means a junction which interrupts the traffic flow and causes different emissions (stop&go) from the rest of the road;

***

D. Site selection, its review and documentation

In Point D.6 (below), a new requirement is expressed to apply proper screening and interpretation of the ozone monitoring data. We acknowledge the importance to consider meteorological and photochemical processes when interpreting the ozone data, but call for an explanation or guidance how it shall be implemented and what is meant by screening.

6. For ozone measurements, Member States shall apply proper screening and interpretation of the monitoring data in the context of the meteorological and photochemical processes affecting the ozone concentrations measured at the respective sites.

Annex V

The Proposal relaxes measurement uncertainties, and this is needed when limit values are lowered. However, in the Proposal only measurement uncertainties for the new limit values from 2030 onwards is expressed. The measurement uncertainties related to limit values before 2030 (Table 2 in Annex I?) is fully missing. Also, measurement uncertainties for deposition measurements are fully missing although included in the current legislation**.**

The new measurement uncertainty proposed for PM10 is 20% while the current one is 25%. For other pollutants, it seems that the measurement uncertainties have been increased due to the proposed lower limit values, which makes sense to acknowledge the technical difficulties when lower concentrations are measured. Also, we acknowledge that for PM10 *reference methods* the proposed uncertainty is achievable. However, we wish to express our concern for tightening the PM10 measurement uncertainty when *equivalent methods (the automatic measurement systems)* are used, and for which the proposed uncertainty seems unrealistic.

In the first table, SO2 is missing, and also please, specify 'PM10' for lead, arsenic, cadmium, nickel, and benzo(a)pyrene. It would be beneficial to indicate the purpose of the absolute values of maximum uncertainties as currently there is no clear explanation for that.

In the second table, it is not clear for which 'ozone (peak season)' is referring to as peak season is not mentioned elsewhere in the Proposal.

In the third table, NO (nitrogen monoxide) is missing, and it should state NO2/NO/NOx, as NO measurement is mentioned in Annex VII (section 2). Again, please, specify 'PM10' for lead, arsenic, cadmium, nickel, and benzo(a)pyrene. Minimum data coverage has been assigned for the new pollutants, but not for the chemical composition of PM2.5 (ions, EC/OC). Is this intentional? In the group of new pollutants, PM oxidative potential is missing, and we support this as it should not be a requirement to monitor it? Footnote no. 3 seems to be irrelevant for the table, and is more clearly defined in the text following the table.

The sentence below could be deleted, as this has been accounted for in the new minimum data coverages in the third table.

>~~The requirements for minimum data coverage do not include loss(es) of data due to the regular calibration or the normal maintenance of the instrumentation.~~<

Editorial comment: Again, lead should be added in the following sentence:

Furthermore, those provisions on individual samples shall also apply to arsenic, cadmium, >lead,< nickel and total gaseous mercury.

Editorial comment: Please, specify the text to have a proper reference to the third table.

>For total deposition,< Member States may use wet sampling only, instead of bulk sampling, if they can demonstrate that the difference between them is within 10 %.

***

Annex VI

The standards EN 12341, EN 14211, EN 14212, EN 14625 and EN 14626 are under revision. If the timetable of the Directive publication allows, it would be beneficial to include the latest versions in the new Directive.

Editorial comment: The standards could be grouped more logically in the order of gases (SO2, NOx, O3, CO, benzene, VOCs, mercury), PM (PM10, PM 2.5, metals, PAHs, EC/OC, ions) and deposition.

Editorial comment: We would like to draw attention to the titles regarding chemical composition of PM10 and PM2.5: PM2.5 is mentioned in the title for ions (Reference method for the sampling and measurement of NO3-, $SO4^{2-}$, Cl-, NH4+, Na+, K+, Mg^{2+}, Ca^{2+} **in PM2.5** in ambient air) but not for EC/OC, metals and PAHs. Perhaps the titles could be harmonized?

***

Editorial comment: Point 14 (reference methods for ions): please correct typos in the first line:

The reference method for the sampling of >NO3-, $SO4^{2-}$, Cl-, NH4+, Na+, K+, Mg^{2+}, and Ca^{2+} ~~elemental carbon and organic carbon~~< is that >described< in

***

Editorial comment: Could nickel be added below? Should EC/OC and ions be included in the parentheses as well? The two latter paragraphs are already included in Section D, should they be removed here?

C. Standardisation

For gaseous pollutants, the volume must be standardised at a temperature of 293 K and atmospheric pressure of 101,3 kPa. For particulate matter and substances to be analysed in particulate matter (including lead, arsenic, cadmium, >nickel< and benzo(a)pyrene)…

When demonstrating that equipment meets the performance requirements of the reference methods listed in Point A, the competent authorities and bodies designated pursuant to Article 5 shall accept test reports issued in other Member States provided that the test laboratories are accredited by the relevant harmonised standard for testing and calibration laboratories.

The detailed test reports and all the results of the tests shall be available to other competent authorities or their designated bodies. Test reports shall demonstrate that the equipment meets all the performance requirements including where some environmental and site conditions are specific to a Member State and are outside the conditions for which the equipment has been already tested and type approved in another Member State.

Chapter III: Ambient air quality management (Articles 12-18 and relevant Annexes

Article 12: Requirements where levels are lower than the limit values, ozone target value and average exposure concentration objectives, but above the assessment thresholds and (Section 1 of Annex I)

- We can preliminary support the limit values in Table 1 in Annex I. However, we note that WHO recommendations do not include 1 hour limit value for SO2. Therefore we would like to know, what is the basis of the proposal in this regard?
- Is there perhaps a mistake in this Table 2 of Annex I, since for example the limit values for PM 2.5 and PM 10 are the same as in the current Air quality Directive? It is also not quite clear to us what is the deadline for the limit values in Table 2? For instance does the proposed text imply that the deadline should be decided already following the forthcoming negotiations or does it refer to year 2050 or perhaps to the following regular reviews? Or is it meant for limit values before 2030? The Table 2 should be clarified as a whole.

Article 13: Limit values, ozone target values and average exposure reduction obligation for the protection of human health (and Sections 1, 2 and 5, of Annex I)

- Have any time limits been considered for the long-term objectives of ozone? (Section 2, point B, of Annex I)

Article 16: Contributions from natural sources

- We note that the Commission's authority to issue guidelines is deleted from this article. Is it intended to be replaced by a Commission implementing act or a Commission delegated act? This needs to be clarified. There is a need to make sure that the Commission's authority to adopt implementing acts or delegated acts is accurate enough in this matter.

Article 17: Exceedances attributable to winter-sanding or winter salting of roads

- Is PM 2.5 missing? In the part 5 (detailed explanation of the specific provisions of the proposal) of the explanatory memorandum it is stated that this article is extended to include PM2.5. However, PM 2.5 is not included in the article.
- We note that the Commission's authority to issue guidelines is deleted from this article. Is it intended to be replaced by a Commission implementing act or a Commission delegated act? This needs to be clarified. There is a need to make sure that the Commission's authority to adopt implementing acts or delegated acts is accurate enough in this matter.

Article 18: Postponement of attainment deadline and exemption from the obligation to apply certain limit values (and point B of Annex VIII)

- We think that benzo(a)pyrene should be included in the scope of this article. This would be justified from our perspective, as the majority of benzo(a)pyrene emissions in Finland originate from small-scale burning of wood in old fireplaces. Reducing these emissions through rapid measures is challenging, among other things because of the slowness of the renewal rate of the old fireplaces.

Council of the European Union
General Secretariat

Interinstitutional files:
2022/0347 (COD)

Brussels, 20 March 2023

WK 3880/2023 INIT

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CONTRIBUTION

From:	General Secretariat of the Council
To:	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 by delegations

Following the call for comments (WK 3449/23), delegations will find attached the contributions received from the BE, BG, DK, IE, NL and FI delegations.

BULGARIA

Proposal for a Directive of the European Parliament and of the Council on ambient air quality and cleaner air for Europe

Follow-up of the discussions in the WPE on 09.03.2023

Документ: WK 3449/2023 INIT

Chapter II Assessment of ambient air quality and deposition rates

Article 7 Assessment regime

Provisions of Article 7, which refer to Annex II, provide for a single assessment threshold for each pollutant, at levels proposed in the WHO guidelines. It is quite possible that the proposed changes in the air quality assessment will lead to an increase in the number of fixed measurement sites and a significant increase in the associated costs.

We would like to be informed whether the necessary research has been done on the reliability of pollutant level measurements in terms of the capabilities of the measurement methods (in particular, the demonstration of equivalence when measurements are made with automatic measuring devices), given comments on this issue made by other MS. We would like to be informed about the results of the research.

Article 8 Assessment criteria

The proposed provisions of Article 8 provide for enhanced use of modelling in two cases: possible use of modelling (Article 8.2) following a measured exceedance of the assessment threshold set out in Annex II, and mandatory use of modelling (Article 8.3) in the case of a measured exceedance of the limit value (or target value for ozone) set out in Annex I. These provisions raise the question of harmonization of the entire mathematical modelling process (mathematical models, input data, etc.) used by Member States for exceedance cases, as well as the issue of quality control of these data at European Union level. Modelling does not meet the same quality criteria as fixed or indicative measurements. Clarification of the objectives, consequences and expected actions in relation to these provisions is required.

With regard to the proposed provisions (Article 8.3), the question is which exceedances of limit values (from measurements or modelling) will be taken into account and used to assess compliance with the requirements of the Directive for a given pollutant.

The proposed provisions of Article 8.5 provide that if modeling indicates an exceedance of a limit value or target value for ozone in an area of a zone not covered by fixed measurements, additional fixed or indicative measurements shall be used during at least one year after the exceedance was recorded, to assess the concentration level of the relevant pollutant. In our view, the choice of this minimum duration of one year should be justified, taking into account the time required to install the measurement points (funding, administrative procedures, equipment installation, calibration, etc.), as well as the effects of different meteorological conditions for that particular year. In addition, there is the question of how to deal with exceedances identified by modelling if it is not confirmed after application of the additional measurements.

With regard to these questions, we believe that the use of modelling to monitor ambient air quality following an exceedance of a limit value requires clarification. In the absence of

information and clarification on these questions, we believe that this use of modelling should remain only as a nonobligatory option to complement measurements.

Clarification is needed on the biomonitoring provision in Article 8.8. It is not clear whether this implies using data for the purposes of this Directive, collected by the monitoring networks under Directive 2016/2284, or whether additional indicators will be needed, e.g. for other pollutants not included in Directive 2016/2284.

Article 9 Sampling points

In Article 9.2, we believe the correct reference should be to Tables 1 and 2 of Annex III.

Article 9.6 – Our understanding of the text as proposed is that the results of air quality modelling shall be taken into account for the assessment of compliance with the limit values set by the Directive. We do not support this approach to assessing compliance given the comments on Article 8.3 and the much greater uncertainty of this assessment compared to measurement results.

Annex III, A, point 2 Point sources – The text that provides for determining the number of sampling points around large point sources is not clear – clarification is needed. It is also not clear how the application of best available techniques can be monitored/measured/demonstrated by fixed measurements at air quality monitoring sites. Clarification is also needed on this point.

NETHERLANDS

Ambient Air Quality Directive – articles 12-18

Written comments of the Netherlands

Article 12:

Paragraph 1:

No comment.

Scrutiny reservation for the values in Annex I, section 1.

Paragraph 2:

No comment.

Paragraph 3:

The text of this paragraph is ambiguous. One could read that the levels of those pollutants *at all locations* should be kept below the Average Exposure Concentration Objective, or at all urban background sampling points, or even that the average of all sampling points should be kept below the Average Exposure Concentration Objective. The last option should be correct.

Paragraph 4:

The phrase "in line with the air quality guidelines published by the WHO" should be specified → "in line with the air quality guidelines published by the WHO **in 2021**".

Article 13:

Paragraph 1:

Scrutiny reservation for the values in Annex I

Paragraph 2:

Here should be added the same phrase as in Article 12, section 2: '…**in so far as factors including the transboundary nature of ozone pollution and meteorological conditions permit**…'

Paragraph 3:

'…are met throughout their territory..' could be ambiguous, and can better be changed into: '…**for their territory**'.

Paragraph 4:

Text: No comment.

Annex: Scrutiny reservation.

Paragraph 5:

No comment.

Paragraph 6:

Text: No comment.

Annex: Scrutiny reservation.

Paragraph 7:

Question: Does this only hold for national air quality standards, or also for air quality standards which are to be established on a regional/local scale? Starting on 1 January 2024, new environmental and planning legislation in the Netherlands ('Omgevingswet') allows regional and local governments to decide on 'environmental values' ('omgevingswaarden'), including air quality limit values in their respective territory. It could be too much to include the need to report this to the Commission.

Article 14:

Text: No comment. Annex: Scrutiny reservation.

Article 15:

Paragraph 1:

Text: No comment.

Annex: scrutiny reservation.

Paragraph 2:

Text: No comment.

Annex: Scrutiny reservation.

Paragraph 3:

No comment.

Paragraph 4:

Proposal: '**probable** predicted exceedances' to allow for uncertainties in modelling (also to be applied in the Annexes).

Article 16:

'For a given year' should be changed into '**or a specified longer period**'.

Article 17:

Paragraph 1:

'For a given year' should be changed into '**or a specified longer period**'.

Article 18:

Paragraph 1:

- The Netherlands would like to add 'site-specific **emission and** dispersion characteristics'.
- The Netherland would like to add '**the regular presence of sea going vessels for which emission standards are not being regulated within the EU framework**' and '**the transformation of installations in highly industrialized areas for the transition towards climate neutrality**' in the list reasons on basis of which deadlines may be postponed.

Other paragraphs:

No comments.

IRELAND

- Comments on the proposal to update the Ambient Air Quality Directives

We welcome the Commission proposal on the recast of the Ambient Air Quality Directives and are broadly supportive of a high level of ambition in this area. Please find below some comments and queries from Ireland on the proposal. These do not preclude any additional questions and comments in the future, in particular if further issues are identified or new information becomes available, and do not represent any positioning of Ireland.

Reservation of scrutiny remains.

Chapter	Heading	Articles	Comment
I	General Provisions	1-6	**Article 5** Responsibilities now include *'ensuring the accuracy of modelling applications:'* what exactly would this entail, is this all ambient modelling in the MS? Further detail on the extent of this responsibility would be helpful.
II	Assessment of AA	7-11	**Article 8** Paragraph 8: The term 'bio-indicator' should be explained further with a definition or examples. **Article 10** Can existing monitoring stations be upgraded and considered monitoring super sites? Paragraph 6: Lead has not been included here – is this intentional? Paragraph 5: Measurement of the PM oxidative potential is, at the moment, only carried out by a few scientific groups. There is no standard method available, yet. **Article 11**

			There are currently no reference methods for UFP, BC and PMOP. Will these be developed at a later stage?
III	AA Quality Management	12-18	**Article 15** Paragraph 4: What would be required to trigger a predicted exceedance, i.e., forecast models, etc? Further clarity here would be welcome.
IV	Plans	19-21	**Article 20** Short term plans: When preparing an AQ plan, the risk of exceedance of the alert thresholds must be considered. A model would be required for this.
V	Information/Reporting	22-23	**Article 22** Is there a reason why the word 'ambient' was deleted? **Article 23** Reporting to the Commission has been reduced from 9 months (September) to 4 months (April). This is a significant reduction and reporting all validated data within this time frame will be extremely difficult to achieve.
VI	Delegated and Imp Acts	24-26	-
VII	Access Justice/Comp	27-29	-
VIII	Transitional/ Final Prov	30-33	-
Annex			
I	AQ Standards	[redacted]	**Section 3** Ammonia has been added as a pollutant of emerging concern that will require monitoring. Given that the impacts of ammonia on sensitive ecosystems are well characterised, was any consideration given to defining a Critical Level which could be aligned with the UNECE Air Convention?
II	Assessment Thresholds		
III	Monitoring points		

IV	Assessment and sampling		
V	Data Quality		**Section A** How do uncertainties for objective estimation or for modelling need to be assessed when no measurements are available i.e. in zones where the assessment threshold is not exceeded? More clarity should be given on the data quality objectives for modelling. Guidance would be welcome to help clarify the minimum number of available monitoring points to be used for modelling. **Section B** '*The requirements for minimum data coverage do not include loss(es) of data due to the regular calibration or the normal maintenance of the instrumentation. Such maintenance shall not take place during pollution peak periods*.' According to AQUILA WG2 recommendations, this provision should be removed. This is also in line with current IPR guidance, where 90 % data capture is reduced to 85 %. The 5 % reduction to allow reasonable time for regular calibration and normal maintenance. **Section C** AQUILA WG2 suggests an additional paragraph stating the need to develop guidance specifying appropriate methods for assessing compliance where data quality objectives are not achieved or cases of low data capture (e.g. indicative measurements). The need for such guidance remains, as it is unclear how compliance with daily, hourly and 24-hour mean limit and target values can be assessed when there is not a high level of data coverage.
VI	Reference Methods		
VII	Monitoring Mass C and Chem		
VIII	Info for AQ plans		
IX	Public Information		

DENMARK

Written contribution from Danmark – Ambient Air Quality Directives

16. Marts 2023

Danmark has three points

Use of modelled data for assessment

Several MS raised the issue about the stutas of modelling. As proposed on WPE 9th of March we suggest to take text from Annex IV and merge in article 9, 6 whike strengthening the requirement a bit:

6. Available results of modelling applications and indicative measurements shall be included for assessment of air quality with respect to the limit values and ozone target values following the principles Annex IV Points B and C for selection of relevant model datapoints.

Rationale: This change will clarify results must be included when assessing air quality if available, but that the relevant data point must be selected in the same manner as measurements stations must be representative.

Also, we can reiterate on our reluctance towards indicative measurements. We don't think doing low quality measurements at random times during the year while provide much usefull data. We would also like to akcknowledge that the provisions on reduced monitoring are very lax in the current directice. However, the new provisions in 3. (a) and (b) below should be sufficient to ensure that a solid assessment of the air pollution in each zone will take place.

Proposed changes to the annexes

We did not provided written comments on the annexes last round so we would like to mention a few details.

Annex IV, part A, (c)

Rationale: this is a very specific situation that would be better covered by quidance. Also, it clearly a location where neither modelled nor measurements can be performed under the provisions of annex IV, which makes it a bit fuzzy what it really means.

Annex IV, part C

(b) in general, the sampling point inlet shall be between 0,5 m (the breathing zone) and 4 m above the ground. Higher siting may be appropriate if the sampling point is representative of a large area (a background location) or in other specific circumstances and any derogations shall be fully documented;

Rationale: There is already a requirement that derogations needs to be fully documeted so no need to put in an additional limit. Denmark have background stations at up to 20 meters height and we have documented with parallel measurements that pollution levels are identical to those measured at nearby ground level urban background locations. Several roof top locations have very long time series (40 y+) and it would be a shame to discontinue them. If needed the text could be further strengthened by requiring the documentation should include parallel measurements and be repeated over time.