



Department
for Environment
Food & Rural Affairs

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Consultation on draft plans to improve air quality

Tackling nitrogen dioxide in our towns and cities

September 2015



Llywodraeth Cymru
Welsh Government





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Introduction

1. A cleaner, healthier environment benefits people and the economy. Clean air is vital for people's health and the environment, essential for making sure our cities are welcoming places for people to live and work now and in the future, and to our prosperity. Our ambition is to make the UK a country with some of the very best air quality in the world.
2. Over recent decades, air quality has improved significantly thanks to concerted action at all levels, including investing some £2 billion since 2011 to increase the uptake of ultra-low emission vehicles and cleaner transport, and supporting local authority action. Our environment has never been cleaner. Even in our busiest cities we have seen falls in harmful emissions, for example a 15% reduction in average roadside concentrations of nitrogen dioxide (NO₂) since 2010, but there is more we can do.
3. Tackling air pollution is a priority for this Government. We will achieve this by exploiting new, clean technologies, such as electric and ultra-low emission vehicles, to cut emissions and help our great cities function more smartly and efficiently. To spur further innovation, we have opened up our data so that the whole country – people, businesses and the public sector – can use it to take better decisions and action. We will also work with our great cities to help them make the changes they need to become greater still. This could include improving their bus and taxi fleets, investing in cycling infrastructure and upgrading roads so they run more smoothly.

Purpose of consultation

4. This consultation seeks views on draft plans to improve air quality. These set out the action taken, being implemented and planned at local, regional and national levels to meet the annual and hourly EU NO₂ limit values in the shortest possible time.
5. This consultation applies to England, Wales and Northern Ireland. A separate consultation is being carried out by the Scottish Government.

Relevant documents

6. This consultation is made up of:
 - This consultation document which summarises the key elements from the draft plans and identifies the main areas where we are seeking your views;
 - A draft UK overview document which sets out the UK's approach for meeting NO₂ limit values in the shortest possible time;
 - Draft plans to improve air quality in each of the 38 zones exceeding the annual mean limit value for NO₂. The zone plans contain the information required by the Ambient Air Quality Directive, describe the compliance situation for each zone and include more detailed information on measures being taken at a local level; and
 - An evidence annex is included for information. This document assesses the impacts of the plans on air quality and public health in England.
7. Before responding to the questions set out in this consultation document, we recommend that you read the draft UK overview document, together with the draft plan(s) for the zone(s) you are particularly interested in.

8. You can access the draft UK overview document via the Defra consultation webpage (<https://consult.defra.gov.uk/airquality/draft-aq-plans>). The draft plans to improve air quality in each of the 38 zones are hosted on Defra's UK Air website which has been designed to help you easily find the draft plan for the part of the country you are interested in (<http://uk-air.defra.gov.uk/library/no2-consultation-documents-2015>).

The Challenge

9. The UK is compliant with EU legislation for nearly all air pollutants. However, we face a significant challenge meeting the NO₂ limit values in some areas, as do many other Member States. The EU Ambient Air Quality Directive (AQD) sets limits on key air pollutants, for NO₂, there are two limit values for the protection of human health:
 - (i) annual mean concentration levels of NO₂ do not exceed 40µg/m³; and
 - (ii) hourly mean concentration levels of NO₂ do not exceed 200µg/m³ more than 18 times a calendar year.
10. The UK is divided into 43 zones and agglomerations for air quality monitoring and reporting purposes. This is described in more detail in section 2.2 of the draft UK overview document. In 2013, 38 out of the 43 UK zones were assessed to be exceeding the maximum annual limit¹ for NO₂, together with one zone exceeding the hourly limit.
11. Road transport is the dominant source of pollution in areas where the UK is exceeding NO₂ limit values, although the effects of urban and regional background non-transport sources are still considerable.
12. In 2013, 17 Member States (including the UK) reported exceedances of the annual mean limit value and four Member States (including the UK) reported exceedances of the hourly mean limit value. One of the main reasons for not meeting EU limits, is that the introduction of increasingly strict standards for NO_x emissions from diesel light duty vehicles has not delivered the expected emission reductions in real world use. Diesel light duty vehicles have emitted more in practice than under test conditions. This disparity has meant the expected reductions from the introduction of stricter Euro emission standards have not materialised.
13. The European Commission has started formal infringement proceedings against six Member States (including the UK) for not achieving NO₂ limit values. We are fully committed to complying with EU air quality standards and have undertaken to provide revised plans to the Commission setting out how we propose to bring the UK into compliance in the shortest possible time. The plans will be submitted to the Commission by 31 December 2015.
14. Submission of the air quality plans to the Commission will also satisfy the requirements of the ruling by the Supreme Court.

¹In 2013 7 of these zones which exceeded the 40 µg/m³ had a valid time extension. The UK has been granted a time extension for compliance with the NO₂ annual mean limit values in 12 zones and agglomerations. Where a time extension applies the UK is required to provide the Commission with data indicating that the annual mean NO₂ concentrations in these zones have remained below the annual limit value plus the maximum margin of tolerance of 60 µg/m³.

UK approach

15. New projections based on latest data indicate that 35 out of the 43 UK zones are expected to be compliant with legal limits for NO₂ by 2020. These projections look at five year intervals going forward with a baseline year of 2013. The quantifiable impact of measures implemented and planned since we last submitted plans in 2011 have been included.
16. Action required to improve air quality needs to be taken at individual, local, national and international levels. The plans set out in the accompanying documents take a comprehensive approach, addressing all zones in exceedance and identifying actions needed to bring these zones into compliance in the shortest possible time.
17. On average, around 80% of NO_x in areas where the UK is exceeding limits is due to transport. Addressing transport therefore presents a significant opportunity to improve air quality. Transport is a key part of almost everything we do, as individuals or businesses, and its impacts are much wider than air quality. As such it is essential we take an integrated approach. By the careful choice of measures, recognising the economic impact and value, we can deliver much broader benefits alongside air quality, including reducing CO₂ emissions and congestion and improve productivity.
18. Equally, how we all act on a personal level can help tackle the sources of, and reduce our exposure to, pollution. Access to data and information is key to our ability to make informed choices. We are committed to unleashing air quality data and working with others to develop innovative tools and ways to help us all make those choices.
19. Local authorities have a central role in achieving improvements in air quality. Their local knowledge and interaction with the communities that they serve mean that they are better able to identify the issues on the ground in detail and the solutions that may be necessary or appropriate. Within the UK, there are over 400 local authorities, including 33 London Boroughs. As zones and agglomerations move closer towards and into compliance, the problem areas are likely to become more isolated and local action will be key to addressing them.
20. Responsibility for meeting air quality limit values in the UK is devolved to the national administrations in Scotland, Wales and Northern Ireland. The Secretary of State for Environment, Food and Rural Affairs has responsibility for meeting the limit values in England and the Department for Environment, Food and Rural Affairs (Defra) co-ordinates assessment and air quality plans for the UK as a whole.
21. The UK overview document should be read alongside the individual air quality plans for the achievement of the NO₂ limit values. A separate document with the complete list of UK and national measures undertaken since 2008 will be finalised after the consultation and will be included as part of the package to be submitted to the Commission.

Question 1: Do you consider that the proposed plan set out in the overview document strikes the right balance between national and local roles?

Air Quality Zone Plans

22. In addition to the draft UK overview document, we have produced a zone plan for each of the 38 zones that were non-compliant in 2013. These have been produced in consultation with local authorities who are best placed to understand the exact causes and nature of emissions in specific areas and the solutions that may be necessary or appropriate. We wish to ensure the draft plans correctly reflect the efforts underway at the local level and also that these plans achieve compliance with the NO₂ limit values in the shortest possible time. The plans should be read in conjunction with the separate draft UK overview document.
23. The zone plans take 2013 as the base reference year. Each air quality zone plan presents an overall picture of the NO₂ concentrations in the zone for 2013. This includes identifying exceedances of the NO₂ limit levels and source apportionment for each exceedance. The plans also contain details of local air quality measures that have been implemented, will be implemented or are being considered for implementation in the zone.
24. Where measures were put in place and completed before 2013, the improvement in air quality resulting from these measures will have been included in the assessment used to compile the emission inventory. The impact for all quantifiable measures has been included in the baseline projections.
25. It has not been possible to quantify the impact of all national measures on emissions and ambient concentrations in the individual zone plans. This information will, so far as possible, be included in the final UK overview document before it is submitted to the European Commission.
26. A Technical Report on the modelling and assessment techniques used is being prepared. This will also form part of the package to be submitted to the Commission by the end of the year.

Question 2: Are you aware of any other action happening in your area which will improve air quality and should be included in the plan? If yes, please identify as far as you are able:

- a. What the additional actions are;
- b. The zone(s) in which they are being taken; and
- c. What the impact of those actions might be (quantified impacts would be particularly useful).

Question 3: Within the zone plans there are a number of measures where we are unable to quantify the impact. They are included in the tables of measures. Do you have any evidence for the impact of these types of measures?

Geographically targeted measures

27. Meeting our long term goal of nearly every car and van to be electric or a ULEV will be critical to the delivery of a sustainable permanent improvement in air quality and the decoupling of economic growth from both CO₂ emissions and air pollution.
28. In tandem with this goal, our approach focuses on the immediate challenges in each zone and, in some zones, this means the particular roads that present the most intractable problems. The measures identified in the draft UK overview document reflect this multi-layered approach of improving the situation on specific roads, addressing the wider air quality issues in an area and driving longer term fleet turnover to embed the air quality improvements.
29. In keeping with the localism agenda, the principal responsibility for implementing geographically targeted measures will rest with relevant local authorities. The Government will consider the appropriate incentives required to help secure the delivery of the measures and the associated air quality improvements. The final shape of the plans and incentives will be determined taking into account the outcome of the consultation and the current Spending Review.
30. A number of authorities are already considering the use of access controls to tackle air pollution and several have already implemented them. Measures can vary from introducing low emission zones through to closing roads to certain vehicles. The London Low Emission Zone is the largest in Europe and other UK cities have implemented zones to ensure the use of cleaner buses.
31. Local authorities and businesses in England have indicated that there would be benefits in having a framework for clean air zones in order to deliver a consistent approach, as opposed to the current city by city approach. Clean air zones in England, as set out in section 4.3.6 of the UK overview document, can play a role both by directly reducing the number of polluting vehicles in an area and by encouraging the uptake of alternative low emission vehicles and fleet turnover. Implementing these on a consistent basis gives a clear market signal and allows businesses and individuals to make vehicle choices which are then eligible to be driven within any city.

Question 4: Do you agree that a consistent framework for Clean Air Zones, outlined in section 4.3.6 of the UK overview document, is necessary? If so, do you think the criteria set out are appropriate?

32. The local measures outlined in the plans are not mutually exclusive and a combination of measures will be needed to deliver the necessary air quality improvements. Individual road and junction improvements identified in the zone plans will help reduce congestion. Local authorities can assess the impact of these and consider what more action is needed in terms of access controls and other measures

to deliver the required reductions. Low emission strategies are one route to deliver this.

33. Clean Air Zones, in particular, can be a local focal point for action to enhance public transport and accelerate electrification of buses, taxis, vans and cars, to increase both local uptake and support national ambition.
34. We also want to encourage more walking and cycling and making the most of public transport. This could include a range of measures such as developing safe cycle/walking routes.
35. Overall, these measures delivered together and tailored to local needs, will not only deliver air quality improvements but enhance our cities as places to work, live and spend leisure time.
36. There will be challenges associated with the measures set out in the plans, both practical and political. Local authorities will need to tackle these for the measures to deliver.

Question 5: What do you consider to be the barriers that need to be overcome for local authorities to take up the measures set out in section 4 of the UK overview document? How might these be overcome? Are there alternative measures which avoid these barriers?

Non-transport measures

37. Transport measures are a main focus of the plans as transport is responsible for over three quarters of the NO₂ in the exceeding areas. However, there are opportunities to take effective action on other sources which we have also set out in the plans.

Question 6: Are you aware of any additional action on non-transport sources to improve air quality that should be included in the plans?

Evidence analysis

38. The plans set out action across a range of areas to help solve the problem of NO₂ exceedances within the UK. As we move forwards, our projections show the issues become much more localised in nature. For each zone we have considered the trajectory between the most recently reported compliance data (2013) and the projection for 2020. Local authorities have provided information on action currently underway and planned, including action on transport that could have significant air quality impacts.
39. The most straightforward approach to assess the possible impact of these measures was to model access restrictions on those roads which are projected to be in exceedance. In reality, local authorities can conduct a more detailed assessment of their needs and select the combination of measures necessary to deliver compliance which may or may not include access restrictions. However, this simplification gives an indication of what can be achieved.

40. By lowering transport emissions the results show, as presented in the evidence annex, the UK would achieve compliance with legal limits for NO₂ by 2020 in all areas outside of London. London, where the most severe issues arise, would be compliant by 2025. This would bring forward compliance by between 5 and 10 years.
41. The primary benefit of these measures is the impact on public health and the natural environment. Overall, we expect the measures to provide £2.7 billion in benefits within the range of £1.2 billion to £4.3 billion. The cost of cleaning up the fleet is estimated at £1.2 billion within the range of £1.2 billion and £1.7 billion. Overall, the measures provide a positive benefit to cost ratio of 2.2.
42. The evidence annex provides a technical explanation of how these measures have been assessed, the impacts and the uncertainties.

Who will be interested in responding?

43. This is a public consultation and it is open to anyone with an interest in providing comments. It should be of particular interest to local authorities, environmental groups and those operating in the sectors of transport and public health, and organisations with an interest in air quality.

How to respond to this consultation

44. The consultation will run for 8 weeks from 12th September to 12.00 midnight on 6th November 2015.
45. Please respond to this consultation using the Citizen Space consultation system (<https://consult.defra.gov.uk/airquality/draft-aq-plans>).

Confidentiality and data protection

46. A summary of responses to this consultation will be published and placed on the Government websites at: www.gov.uk/defra, www.gov.wales.uk and www.northernireland.gov.uk.
47. The summary will include a list of names and organisations that responded but not personal names, addresses or other contact details. Information provided in response to this consultation document, including personal information, may be subject to publication or release to other parties or disclosure in accordance with the access to information regimes e.g. Freedom of Information Act 2000 (FOIA) and the Data Protection Act 1998.
48. If you want information, including personal data, that you provide to be treated as confidential, please say so clearly in writing when you provide your response to the consultation why you need to keep these details confidential. If we receive a request for disclosure under the FOIA, we will take full account of your explanation, but we cannot provide an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as a confidentiality request.
49. This consultation is being conducted in line with the “Consultation Principles” as set out in the Better Regulation Executive guidance which can be found at: <https://www.gov.uk/government/publications/consultation-principles-guidance>.

50. If you have any comments or complaints about the consultation process, please address them to:

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Room 629,
9 Millbank,
17 Smith Square,
London, SW1P 3JR.

Or email: consultation.coordinator@defra.gsi.gov.uk.

Next steps

51. This consultation will run for 8 weeks. We will publish the summary of consultation responses within 12 weeks of the consultation closing. Subject to any changes as a result of this consultation, we plan to submit the revised air quality plans to the European Commission by the end of 2015.