

Expert testimony to inform NICE guideline development

Section A: Developer to complete	
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Guideline title:	- Transport Related Air Pollution
Guideline Committee:	- PHAC E
Subject of expert testimony:	- National and local frameworks for action
Evidence gaps or uncertainties:	- What are the current EU Directives and standards relevant to transport related air pollution? How is this reflected in national legislation? What future changes may occur over the lifetime of the guideline? What other international (WHO) standards or guidelines exist and what influence do they have? How are international/national standards/requirements implemented locally? How is air pollution addressed locally? What are the key issues that influence local action? How does air pollution and action on air pollution mesh with other topics?
Section B: Expert to complete	
Summary testimony:	-
Question 1. What are the current EU Directives and standards relevant to transport related air pollution?	
<p>The 2008 Ambient Air Quality Directive (2008/50/EC) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂). Additionally separate legislation exists for emissions of air pollutants with the main legislation being the UNECE Gothenburg Protocol which sets national emission limits (ceilings) for countries to meet from 2010 onwards. These directives are the drivers to reduce emissions from various sectors including transport.</p> <ul style="list-style-type: none"> - The current relevant transport standards used for vehicle emissions are the Euro standards. These standards apply to new vehicles being sold in the EU and set emission limits on carbon monoxide (CO), oxides of nitrogen (NO_x), hydrocarbons (HC) and particulate (PM) emissions from the tail-pipe under set drive cycles. The emission limits also differ for diesel and petrol versions of a vehicle. The pollutant 	

- emissions from road vehicles are regulated separately for light-duty vehicles (cars and light vans) and for heavy-duty vehicles (trucks and buses). Whereas for light-duty vehicles (passenger cars and light goods vehicles), the standards are defined by vehicle driving distance, g/km, for trucks and buses are defined by engine energy output, g/kWh.
- Current standards in operation are: Euro 6 (since Sept. 2015) for light-duty vehicles and Euro VI (since 2014) for heavy-duty vehicles.
- The Euro 6C World harmonized Light vehicles Test Procedure/Cycle (WLTP/C) will come into effect in 2018/19 to test cycles light-duty vehicles under more real-world driving conditions.

Question 2. How is this reflected in national legislation?

The 2008 European directive was made law in England through the Air Quality Standards Regulations 2010 that sets targets for levels in outdoor air of pollutants. Equivalent regulations exist 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
- Defra reports to the commission on UK air quality annually. It reports on the 43 zones and agglomerations for air quality monitoring and reporting purposes. Each zone is required to be compliant with the concentrations of specific pollutants by a set date. (Member States were required to meet these limits by 1 January 2010 unless an extension was granted for up to 5 years to 1 January 2015.)
- The UK has identified non-compliance for nitrogen dioxide (NO₂) in 5 zones and has recently developed air quality plans (Dec 2015) to target reductions in the non-compliant zones in the UK by 2020 (Southampton, Derby, Nottingham, Leeds, Birmingham) and 2025 (London).

Local air quality management (LAQM)

The UK Government and the devolved administrations are required under the Environment Act 1995 to produce a national air quality strategy (2007). The strategy sets out the UK's air quality objectives and recognises that action at national, regional and local level may be needed. Local air quality management (LAQM) is the mechanism with which authorities undertake actions on air quality.

- Section 82 of the Environment Act 1995 provides that every local authority shall review the air quality within its area, at the present time and the likely future air quality.
- Section 83 requires local authorities to designate an Air Quality Management Area (AQMA) where air quality objectives are not being achieved, or are not likely to be achieved, as set out in the Air Quality (England) Regulations 2000.
- Section 84 as amended by the Deregulation Act 2015 - Part 4 of Schedule 13, once an AQMA has been designated the district council should prepare an Action Plan that sets out how it will achieve the air quality objectives for the area.
- Relevant powers and mechanisms include environmental health functions including those concerning the Clean Air Act (e.g. the ability to declare smoke control areas) and land use planning. The Action Plan should be in place within 12 months of the district council identifying the need for one.

Question 3. What future changes may occur over the lifetime of the guideline?

- Revisions of the Ambient Air Quality directive are possible, this will drive changes in UK legislation.
- Future redevelopment of WLTC emissions testing may occur in future years as the system evolves and is challenged.

Question 4. What other international (WHO) standards or guidelines exist and what influence do they have?

- WHO standards have less influence in the UK/EU as the EU directives and UK legislation is well defined.
- WHO research continues to support and influence health impacts of air pollution and UK committees such as COMEAP, who advise UK Govt. will inform and update Defra and Department of Health on developments.

Question 5. How are international/national standards/requirements implemented locally?

- National air quality standards are implemented through LAQM.

Question 6. How is air pollution addressed locally?

Currently, there are over 700 active Air Quality Management Areas (AQMAs) designated across UK local authorities, mostly for Nitrogen Dioxide (NO₂).

- LAQM provides local authorities with the mechanism and guidance to manage local air quality, in tandem with national level actions and legislation.
- LAQM guidance has been updated in 2016. The guidance sets out how local authority's assess and manage local air quality.
- Local authorities use LAQM and air quality action plans (as local policy) to influence transport and land-use policy, public health and climate change/sustainability policies and strategies.

Question 7. What are the key issues that influence local action?

The key issues that influence local action are:

- Engagement and ownership of air quality issues with political members and senior officers at authorities
- Engagement and involvement with key delivery partners: transport authorities, land-use planning, higher-tier authorities.
- Public information and understanding of issues.
- Funding and resourcing for local action at the local authority level enables the actions to improve air quality.

Question 8. How does air pollution and action on air pollution mesh with other topics?

Public Health:

- Air pollution impacts on vulnerable individuals and PH are a key partner needed to understand and support actions. PH evidence of impacts help assist authorities influence change (internally and externally) with authorities.

Climate Change:

- Carbon emission reduction actions are mostly beneficial to air quality. Working together can deliver win-wins for both areas.

Transport:

- Pollution from transport emissions account for the majority of 700+ declared

AQMA's, so it is a key delivery element for action planning to reduce emissions and congestion.

Land use planning:

- Both strategic planning and development planning can have a major influence on air quality. By encouraging low emission/sustainable development the planning authorities can improve air quality by reducing emissions from transport and reduce exposure to new or existing residents by considering pollution issues when a development is planned.

Low emission strategies and low emission planning guidance linked to action plans have been used successfully by UK authorities to support actions on all the above sectors.

References:

- European Directive 2008 Ambient air quality directive (2008/50/EC) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>
- Part IV of Environment Act 1995 <http://www.legislation.gov.uk/ukpga/1995/25/part/IV>
- Air Quality Standards Regulations 2010 <http://www.legislation.gov.uk/uksi/2010/1001/contents/made>
- Local Air Quality Management guidance <http://uk-air.defra.gov.uk>