Sweden

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### AVOSETTA MEETING in London 24-25 May 2019 Professor Jan Darpö, Uppsala Universitet

### Air Quality: National Context

1. What are the main sources of unlawful levels of air pollution in your Member State?

- In Sweden, the most important air quality problems relate to particular matters (PM<sub>10</sub>/PM<sub>2,5</sub>) and nitrogen dioxide (NO<sub>2</sub>). In quite a few urban areas, the levels of those pollutants exceed the air quality standards and the impact on human health is still significant. The main sources are road traffic, long range transportation of particles from other parts of Europe and small scale domestic heating (furnaces in the homes, mostly outside of urban areas). A Nordic peculiarity concerning road traffic is the wide use of studded tires, something that substantially contributes to the high levels of particular matters in the ambient air in urban areas. The long range transportation of pollutants come from all areas of Europe, although winds from the west are dominating in our country. Thus, an important part of the pollution comes from the UK, a phenomenon which is expected to continue even after Brexit. On the other hand, when the winds blow from Eastern Europe, the pollution is also quite significant, as the air quality in those regions is among the poorest in Europe.

2. How extensive is reported non-compliance with AQD air quality standards in your Member State?

For AQD air quality standards, please refer to AQD, Articles 12-19. Please refer to data either reported to the Commission or otherwise available in your Member State. It may be easiest to set this information out in a table for different standards for certain pollutants (NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> are likely to be the main pollutants for which there may be reported non-compliance with AQD standards).

a. If data on compliance with air quality standards is incomplete, please indicate the extent of the non-compliance with requirements of Article 26 AQD (public information requirements).

- In the calendar year 2017, there was 19 exceedances reported from nine cities in Sweden. Two of these concerned PM<sub>10</sub> and the rest NO<sub>2</sub>. Ten Air Quality Plans are in place for the cities Stockholm, Göteborg, Umeå, Uppsala, Sundsvall, Luleå, Örnsköldsvik, Linköping, Norrköping and Skellefteå. All of these deal with particular matters and/or nitrogen dioxide. As of today, five Air Quality Plans are concluded due to successful efforts to lower the levels of those pollutants (Göteborg, Helsingborg, Norrköping, Malmö and Jönköping). The information to the public on air pollution according to Article 26 AQD is accessible on the website of Swedish Environmental Protection Agency (Naturvårdsverket):

www.naturvardsverket.se/luftenisverige www.naturvardsverket.se/luft www.naturvardsverket.se/mknluft

Here, one can find information about the air quality control, effects on the human health, exceedances and levels of pollutants in several cities/municipalities. Also the cities/municipalities are required to inform the public on air pollution, which is done on websites of their own. However, many municipalities perform poorly in this respect. Data host for the whole information system is the Swedish Meteorological and Hydrological Institute (SMHI). All information from air quality measuring in the country is reported here in (not very accessible) tables.

# www.smhi.se/datavardluft

- 3. Have EU infringement proceedings been brought against your Member State for failure to comply with the AQD?
  - a. If so, what was the outcome of this enforcement action and its impact on air quality law and policy in your Member State? (If enforcement action is ongoing, answer this question as best you can in terms of the effects of this action on your Member State's approach to air quality law and policy.)

- Oh yes..! Already in 2011 in the case C-479/10, Sweden was found in breach of the AQD for exceedances of PM<sub>10</sub> during the years 2005, 2006, 2007 in the zones SW 2 (Zone Middle) and SW 4 (Stockholm), and for the years 2005 and 2006 in SW 5 (Göteborg). In addition to this, there are two ongoing infringement cases and one EU Pilot against our country concerning the AQD.

According to my informants, the Commission has opened infringement cases against 17 Member States including Sweden for exceedance of PM<sub>10</sub> in the ambient air in urban areas. Two test cases are already decided against Bulgaria (C-488/15) and Poland (C-336/16). In those, the countries were found in breach of the directive concerning incorrect transposition and systematic and continuous exceedance of the limit values for PM<sub>10</sub>, postponement of the deadlines set to attain certain the limit values, 'shortest possible' exceedance period, the content of Air Quality Plans and appropriate measures, information needed for an assessment, etc. Actions in the CJEU are also brought against Hungary, Italy and Romania. In the infringement case against Sweden (No 2012/2216), the Commission's complaints in the Letter of Formal Notice 2013-04-26 and the Reasoned Opinion 2015-06-19 concern similar issues. In its replies (2013-06-26, 2015-08-19 and 2016-06-30), Sweden claims that the exceedances are limited to only a few control stations and only some of the daily limit values have been breached with (not the yearly ones) and that the exceedance have not occurred recent years due to appropriate action. Moreover, actions such as raised congestion fees, environmental taxes and environmental zones (where Euro5 and Euro6 cars only are allowed) are on their way and will surely be appropriate in combating the problems with high levels of PM<sub>10</sub> in the urban areas concerned. If this line of argument will convince the Commission remains to be seen.

An EU Pilot was opened against Sweden 2014-02-12 (No 6106/14/ENVI) for omissions in relation to AQS for nitrogen dioxide. This is one of 13 similar cases brought against different Member States, out of which actions already are brought to CJEU against France, Germany and the UK. In the Swedish case, the Commission has focused on the exceedance in zone SW5 (Göteborg). In its replies (2014-04-23 and 2018-11-06), Sweden claims that the exceedance only concerns one control station at a densely trafficked intersection where no person ever resides, that the levels of pollutants are decreasing rapidly and that actions already undertaken, ongoing and planned to bring down the levels of nitrogen dioxide are both appropriate and effective. Further measures such as environmental zones, subsidies for electric cars and a revised Air Quality Plan for Göteborg will also be helpful.

Finally, a LFM was delivered 2019-01-25 against Sweden for inappropriate formal transposition of the AQD in relation to nitrogen dioxide and ozone, for inappropriate content in the Air Quality Plans, inadequate measures concerning transboundary air pollution and for inappropriate methods for measurement and control of those substances (case No 2018/2326). In its reply 2019-03-25, Sweden has pointed to that most of the measures needed must be decided by the Government or SEPA and appropriate action will be taken in the end of the year.

# Air Quality Standards

4. Was there pre-existing national law relating to air quality standards (similar to the AQD), or did the AQD introduce something new in your country?

- No such legislation existed. In the beginning of the 1990s, air quality standards were introduced (NFS 1993:10, 1993:11 and 1993:12), but only requiring that SEPA should be informed and monitoring/measuring should be performed in cases of exceedances. Before that, only some recommendations under the Health Protection Act (1982:1080) existed, also issued by the Swedish Environmental Protection Agency (SEPA). Against this background, the AQD surely introduced something new, although the implementation has been undertaken in phases.

5. How are AQD air quality standards implemented in law in your Member State?

- Air Quality Standards are regulated in Chapter 5 of the Environmental Code. This Chapter sets the basis for all kinds of Environmental Quality Standards, be that for ambient air, water or noise. The more detailed rules on AQS are given in the Air Quality Ordinance (2010:477) and different Regulations issued by the SEPA, out of which NFS 2016:9 on the control of air quality is the most important.

6. Does any law in your Member State provide for air quality standards that go beyond those set out in the AQD, imposing any more stringent standards, for example, in relation to PM<sub>2.5</sub>?

- As shown in the Annex of this report, Sweden has stricter air quality standards for some pollutants such as ozone and Sulphur dioxide (SO<sub>2</sub>). Most of these stricter requirements concern exceedance periods. However, the most important of the stricter air quality standard according to domestic law is the one on nitrogen dioxide. As can be seen in the Annex, the stricter requirements here concern both the exceedance period (daily exceedance to be compared with monthly only in the AQD) and the limit values (90 micrograms per m<sup>3</sup>, instead of 200 micrograms per m<sup>3</sup> in the AQD).

### Air Quality Monitoring and Modelling

7. How are air quality monitoring networks set up in your Member State (briefly)? Do these go beyond the monitoring requirements set out in Chapter II AQD (eg in terms of the number and location of monitoring stations)?

- Sweden prides itself for being one of the originators of the modern legislation on air quality, not least on the international level. Be that as it may, the Swedish system for monitoring air quality follows closely the provisions of the AQD.

8. What sort of problems are encountered in monitoring of air quality in your Member State?

Problems might include: inconsistent results given by different schemes for monitoring air quality, improper siting of measurement equipment, unreliable equipment used, no monitoring established in key areas, unconfirmed results etc.

- The monitoring problems are minor, although the local implementation of the requirements creates weaknesses here and there on municipal level.

9. As far as you can determine, are there limitations or problems with the modelling techniques used in your Member State to assess air quality (where modelling is permitted as a method for assessment under Chapter II AQD)?

- No limitations or problems concerning modelling techniques reported...

#### National Air Quality Plans and Governance

- 10. Does your Member State have a national Air Quality Plan under Article 23?
  - a. If so, to which pollutants does the plan relate (eg NO<sub>2</sub> or PM<sub>10</sub>) and what **key** measures does the plan outline to keep exceedances 'as short as possible'? *Please also indicate if you think there are any weaknesses in the plan.*

- b. If your Member State has such a plan, how is the legal requirement of keeping exceedances 'as short as possible' satisfied? *Please outline any challenges (legal or otherwise) in meeting this requirement in your Member State.*
- 11. Whether or not your Member State has an Air Quality Plan, please outline the **key** national regulatory measures that contribute towards compliance with EU air quality standards in your Member State.

For example, what are the main national legal measures that regulate polluting air emissions from emissions from:

- households (eg restrictions on solid fuels, planning laws);
- transport (eg clean air zones); and
- industry (eg reliance in Industrial Emissions Directive or something more)?
- 12. Has your Member State ever issued a Short-term Action Plan under Article 24? If so, please outline any notable features of the plan or aspects of its implementation (briefly).

- Nope...

13. Which public bodies have legal responsibilities for meeting air quality standards in your Member State?

- The municipalities, the regional County Administrative Boards, the SEPA and other national authorities such as the Transportation Authority.

14. Are there any legal requirements for different public bodies who have control over different air pollution sources to coordinate their efforts in any way to work towards air quality standards? (For example, different regulators may control highways, airports, local urban planning decisions, large industrial installations, and so on.)

# Enforcement of Air Quality Law

- 15. What is the primary mode for enforcing of air quality law in your Member State?
- 16. Have there been court cases concerning the enforcement of air quality law in your Member State? *Please outline major cases or themes in key cases only.*

Just one case, where the Swedish Association for Nature Conservation (SSNC) brought action against the city of Stockholm for its omission to deal with the exceedance of the air quality standard in the area of Hornsgatan, a street with a long history of non-compliance with particle (PM10) and Nitrogen Oxide (NO2) standards. In 2011 a first judgement of the Land and Environment Court in Nacka clarified that the city could not escape responsibility for upholding the standards, and the case was remitted back to the competent authority at municipal level. This national judgement together with the Commission's successful action against Sweden in the CJEU in C-XX, allerted the authorities to action, i.e. a program of spraying affected streets with particle-binding fluids and a ban on studded tires on that street. In Sweden studded tires is the main factor causing high particle concentrations. Today the standards in the Air Quality Directive have been upheld for some years in Stockholm, albeit not the Swedish significantly stricter standards for NO2, and the case is at present tried a second time in the environmental court.

17. Please outline any other major challenges faced in your Member State for enforcing the AQD, or any other applicable air quality law.

- The main problem in my view is that the Air Quality Plans are merely programmatic and that there are no enforcement mechanisms connected to them. In the plan for Stockholm for example, it is clearly stated that

# A Controversial Source of Air Pollution: Regulation of Vehicle Emissions Systems

Many Member States are currently subject to infringement proceedings by the Commission in relation to vehicle type approval rules. This is currently prescribed under Framework Directive 2007/46/EC establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles [2007] OJ L263/1 and Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information [2007] OJ L171/1.

Amongst other things, this legislation requires Member States to have 'effective, proportionate and dissuasive' penalty systems in place to deter car manufacturers from illegal practices, such as installing defeat devices. This legislation was overhauled in 2018 by Regulation (EU) 2018/858 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC [2018] OJ L151/1, which will apply from 1 September 2020.

18. How has your Member State implemented these EU vehicle type approval rules? Have there been any controversies in transposing these rules?

- The implementation of Regulation 2018/858 is on its way, although no actual proposal is made yet and the discussion is only in its cradle. As usual when it comes to car manufacturing in Sweden, any new "administrative burden" will be heavily opposed by the business stakeholders.

19. What legal measures have been taken in your Member State (if any) against car manufacturers which have failed to comply with vehicle type approval rules? *These legal measures might include court cases, including between car buyers and manufacturers.* 

- To my knowledge, no such legal means are available except for the ordinary criminal sanctions for fraud. However, the Swedish Transportation Authority undertakes yearly controls of vehicles 5 years old/driven 100,000 km in order to control of if their emissions meet the standards under the notion of "Sustainable Car Control". About civil remedies, there is a rumour that some Swedish consumers are among those who has sued Volkswagen...

### Case Study

Martha is living in an urban area in your Member State, and her children have developed asthmatic symptoms (i.e. a diagnosed respiratory illness). She becomes aware that the local air quality exceeds standards laid down in the AQD. Her house is next to a main road, which is a heavily used bus route on which bus operators use diesel vehicles. The town also has a number of industrial plants, a coal fired power station, and a number of intensive farms. It is unclear to her precisely which pollution source is causing the breaches of air quality standards, or what their respective contributions might be to the local air quality problem.

What sort of legal action could Martha take in your Member State? And against whom? What remedies do the courts possess? What are the financial implications of bringing such a case? Might there be other regulatory avenues available to Martha instead?

- I would advise Martha to request action from the competent authority, that is the municipality where she lives. If they fail to meet her request or the actions undertaken are inappropriate to deal with the pollution, she can appeal that omission/failure to the Country Administrative Board (CAB) and then further to the Land and Environmental Court (LEC). The trial is on the merits of the case, meaning that the CAB/LEC will evaluate if action is needed or whether the measures undertaken are appropriate to obtain the AQS and to protect the health of Martha and her family. The CAB/LEC can either decide on appropriate measures by themselves, or – more probable in a situation like this – remit the case back to the competent authority (this was what happened in the case on Hornsgatan, described above). There are no costs involved in the appeal procedure and the use of representation (lawyer) is not obligatory, not even if the case goes all the way to the last instance, that is the Land and Environmental Court of Appeal in Stockholm.

In addition to this, if there is a main source to the pollution, Martha may bring private action in court directly against the operator, but this simply does not happen. You don't sue Volvo, so to say, and the reason for this is that you have to work on your own, cover all costs by yourself (no legal aid available), including the litigation costs (Loser Pay's Principle applies)...