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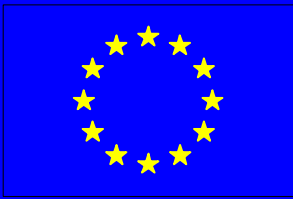
# **Air quality legislation**

## **Croatia and Turkey – the screening process**

**Andrej Kobe, Marco Gasparinetti**

**Clean Air and Transport Unit  
DG Environment**

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# Contents

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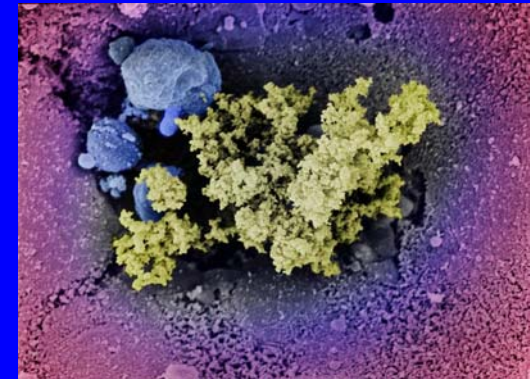
- **Air Quality and Air Pollution**
  - **Concept and Scope of Air Quality Directives**
  - **Main provisions & reporting**
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  - **Thematic Strategy on Air Pollution**
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# Background

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- **In Europe, about 370.000 people prematurely die every year due to bad air quality [CAFE 2005]**
- **Air pollution is also causing severe damage to ecosystems through acid rain and deposition of eutrophying substances.**
- **Air does not respect borders**

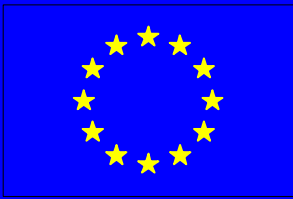




# Air Pollution vs. Air Quality

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- **Air Pollution**
    - Man-made emissions of pollutants into the air
  - **Pollutants disperse, travel distances, go through chemical transformations in the atmosphere**
  - **Air Quality**
    - Concentrations in the near-ground ambient air
  - **People breathe, get exposed to bad air quality**
    - it affects their health
  - **Improvement and protection through**
    - reduction of Air Pollution (emissions)
    - standards on Air Quality (concentrations)
-



Concentrations

Emissions

Framework Directive

1<sup>st</sup> Daughter

2<sup>nd</sup> Daughter

3<sup>rd</sup> Daughter

4<sup>th</sup> Daughter

Exchange Information

National emissions ceilings

Stationary sources

Mobile Sources

IPPC

LCP's

Incineration

VOC's

Non-road

Fuels Quality

Road



# Scope and Objective of AQ Directives

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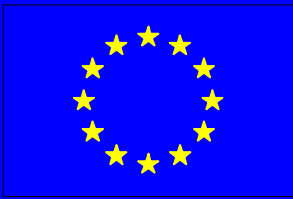
- **Framework Directive 96/62/EC Art. 1**
    - **Establish common objectives for ambient air quality to avoid, prevent or reduce harmful effects on human health & environment**
      - Limit values
      - Target values (to be attained where possible)
    - **Assess ambient air quality on the basis of common methods and criteria**
    - **Public information**
    - **Maintain ambient air quality where it is good and improve it in other cases**
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# Air Quality Framework Directive

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- **Directive 96/62: key obligations applying to all pollutants**
    - **designation of competent authorities, bodies**
    - **preliminary assessment**
    - **zones and agglomerations**
    - **assessment : measurement/modelling**
    - **public information**
    - **plans and programmes**
    - **reports to the Commission**
-



# Air Quality Daughter Directives (1)

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- All include minimum monitoring requirements, stations criteria, reference methods
  - Environmental standards kick-in at different times (2005,2010), until that time for some pollutants application of older Community legislation
  - Directive 99/30: limit values for  $PM_{10}$ ,  $NO_2$ ,  $NO_x$ ,  $SO_2$  and lead
    - Includes provisions for natural events, winter-sanding
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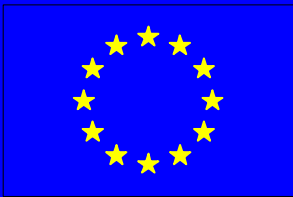




# Air Quality Daughter Directives (2)

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- **Directive 2000/69: limit values for benzene and CO**
    - Includes a derogation scheme for benzene
  - **Directive 2002/3:**
    - Target values for Ozone, includes long-term objectives
    - Monitoring of ozone precursors (NO<sub>2</sub>, VOCs)
    - Additional reporting of provisional summer data
    - Extended provisions on cooperation due to transboundary pollution
  - **Directive 2004/107:**
    - Target values BaP, As, Cd, Ni
    - Monitoring Hg, PAH, background measurements
-



# Exchange of Information

## Council Decision 97/101/EC

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- **Objective**
    - Member States share monitoring data and metadata
  - **A reporting obligation**
    - Mandatory to exchange primary data from all stations used in the assessment under AQ directives
  - **AIRBASE**
    - European wide air quality database
    - Run by ETC/ACC, under contract by EEA
    - Data availability
    - <http://air-climate.eionet.eu.int/databases/airbase.html>
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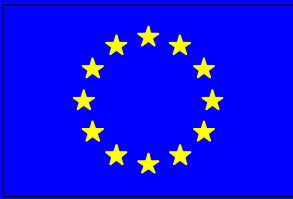


## Key tips

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- **Limit values = source of individual rights (ECJ, case C-361/88 of 30 May 1991, Commission v. Germany).**
  - **Limit values apply everywhere**
  - **Limit values for PM<sub>10</sub> and SO<sub>2</sub> are mandatory as from 1st January 2005!**
  - **Serious compliance issues with PM10 throughout Europe**
  - **NO<sub>2</sub> anticipated to have similar issues in 2010**
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# Health issue: citizens complain!

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## Source of complaints in current MSs:

- **Failure to measure concentrations**
    - **Failure to inform the public**
  - **Failure to establish plans and programmes**
  - **Lack of penalties (must be effective, proportionate and dissuasive)**
    - **...and from 2005, compliance with the limit values!**
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# Compliance checklist (1)

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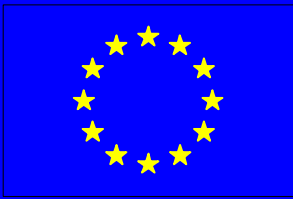
- **Make sure that the concentration levels are assessed (by measuring or modelling) for all the regulated pollutants in all zones and agglomerations; don't forget that measurement is mandatory in all agglomerations.**
    - Are siting criteria, data quality objectives respected?
    - Have you demonstrated equivalence (if not using the reference method)?
  - **Ensure up-to-date and regular information of your citizens (and don't forget to report to the Commission)**
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## Compliance checklist (2)

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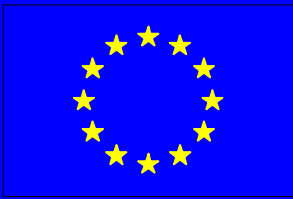
- **Draw up the list of zones and agglomerations for which a plan or program is required (= those in which one or more pollutant exceed limit values + margin of tolerance);**
  - **Establish the plans and programs for attaining the limit values, and « target » your plan in accordance with the specific sources of pollution: complying with the limit values may be difficult, but you will be much more vulnerable to legal challenge if you don't even try!**
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# **The Proposal to revise Air Quality legislation**

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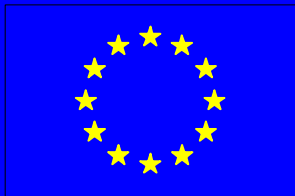


## Major conclusions from development (1)

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- **Major risk to human health related to PM**
  - **Statistical life expectancy currently reduced by 9 months**
  - **WHO advice**
    - Long term exposure more important
    - PM<sub>2,5</sub> better proxy for health effects
    - However, coarser particles as well as short-term exposure must still be addressed : maintain PM10 current limit values
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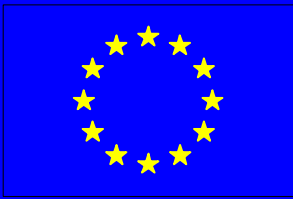




## Major conclusions from development (2)

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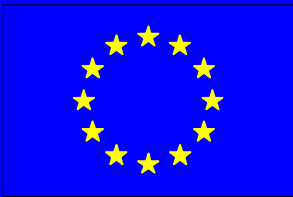
- **Need to revise current AQ legislation**
  - **Harmonise legal text**
  - **Reduce provisions where appropriate**
  - **Take account of experience in implementation**
  - **Confirm legal obligations**
  - **Redraft to introduce additional clarify**
  - **Move towards simplified reporting system (shared information system, INSPIRE)**
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# What is new in the directive?

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- A. Respond to updated health advice**
    - ⇒ environmental objectives for  $PM_{2,5}$
  - B. Address current compliance problems**
    - ⇒ flexibility of attainment date
  - C. Modernize reporting system**
  - D. Miscellaneous**
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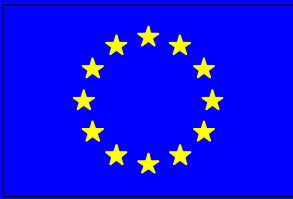
# What's new (1)

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## A. Environmental objectives for PM<sub>2,5</sub>

### Twin approach:

1. Concentration cap to avoid unduly risks from 2010  
to be respected everywhere  
annual average 25 µg/m<sup>3</sup>
  2. Exposure reduction target (between 2010 and 2020)
    - Aim: reduce general exposure in urban background by 20%
    - Exposure indicator: concentration monitored at urban background locations, averaged over 3 years and over all locations
    - Review within 5 years aiming at legally binding obligations
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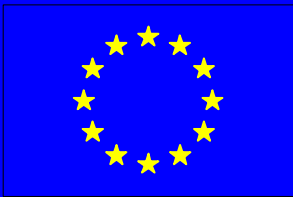


## What's new (5)

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### C. **Miscellaneous**

- ❖ **Additional requirement for background monitoring (supporting EMEP)**
  - ❖ **Possibility to discount for contribution of natural sources (not just natural events)**
  - ❖ **Further specification on QA/QC**
  - ❖ **4<sup>th</sup> DD will be codified into proposed AQD after transposition**
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# Summary

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- ❖ **Bad air quality**
    - ❖ **the most potent environmental killer**
  - ❖ **Implementation - a challenge**
    - ❖ **Need for strong commitment on quality of assessment and public information**
    - ❖ **Abatement may require unpopular measures, cooperation between levels of government**
    - ❖ **take advantage of Community tools & funds**
    - ❖ **Follow closely the implementation of the Thematic Strategy on Air Pollution**
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<http://www.europa.eu.int/comm/environment/air/index.htm>

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## What's new (3)

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### Addressing compliance problems (cont)

#### 2. If attainment date already passed (e.g. $PM_{10}$ )

if LV cannot be achieved because of:

- site specific dispersion characteristics
- adverse climatic conditions or
- transboundary contributions

exempt to comply with those limit values until  
31 Dec 2009 at the latest

Provided that all conditions as in case 1. are fulfilled  
(plans and programmes/abatement programme)

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